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memorandum

date	November 5, 2024, updated February 14, 2025
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cc	Michelle Irace, Principal Planner, Lake County Planning Jessie Lett, ASLA, Roach & Campbell
from	Liza Ryan, ESA Biological Resources Group Saba Asghary and Christine Fukasawa, ESA
subject	**Cobb Community Park – Biological Resources Technical Report**

This technical report summarizes the findings of a habitat assessment and reconnaissance-level biological resources survey performed in support of the Cobb Community Park Project (Project) located one mile south of Cobb, California, near the community of Forest Lake (**Figure 1**). The assessment focused on distinct locations within the 13.13-acre[1] planned park (the study area or site) where future development and recreational use areas are being planned (the study area, **Figure 2**). At the request of Lake County and landscape design consultants Roach & Campbell, an ESA biologist conducted a reconnaissance-level biological survey of the study area to characterize existing habitats and identify regulated biological resources that could potentially be impacted by the Project. The purpose of this memorandum is to describe site conditions and contribute to Project design by identifying sensitive habitat areas and locations likely to support special-status species. An arborist survey was also conducted; that survey report is being separately prepared.

Project Description

The property is planned for development by Lake County as a park. The proposed Project would include an active recreation area in the southwest corner of the site. The active recreation area includes a main parking lot (accessible from Golf Road), signage, a group picnic area, a restroom, a drinking fountain, a grass play field, a playground, an outdoor gathering area, and pathways connecting park amenities.

The pathways would also connect to a bridge crossing Kelsey Creek, throughout the eastern portion of the site, and to a smaller parking lot (accessible from Golf Road) in the northwestern corner of the site. Other park improvements include but are not limited to, pedestrian creek access, a retaining wall along the path in the northwest corner of the site, a gated fire/maintenance access road from Golf Road to the bridge east of the creek, and a fire/maintenance turnout off of Highway 175 in the southwestern portion of the site.

[1] The Project site acreage presented in this report is based on the CAD survey and is greater than the assessed acreage of 12.88 acres.

Property Location

The site is located in southern Lake County, California, along Kelsey Creek at the base of Cobb Mountain, 40 miles north of Calistoga, and 8 miles northwest of Middletown. Kelsey Creek flows south to north across the site (**Figure 1**). The entrance to the park is at 16540 State Highway 175 in Cobb (a census designated place), at the junction with Golf Road. The site is located within the Clear Lake watershed (Hydrologic Unit Code 1802011603), in the Whispering Pines U.S. Geological Survey 7.5-minute topographic quadrangle, and ranges from 2,540 to 2,565 feet in elevation. The study area for the habitat assessment consists of the entire parcel (Assessor Parcel Number #: 013-056-04), bounded by Golf Road, Highway 175, and Cobb Road.

Review of Background Information

Prior to performing the biological surveys, ESA reviewed publicly available data and subscription-based biological resource data. Data sources that assisted in this analysis included:

- Historic and current aerial imagery (Google, Inc., 2024);
- Lake County Parcel Viewer (Lake County, 2024);
- California Wildlife Habitat Relationships (CWHR, 2023) database;
- The California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) list of plant and wildlife species documented on the Whispering Pines and 8 surrounding quadrangles (CDFW, 2024);
- The California Native Plant Society (CNPS) online database of plant species documented on the Whispering Pines and 8 surrounding quadrangles (CNPS, 2024); and
- A U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) list of species that may occur in the vicinity of the study area (USFWS, 2024).

The USFWS, CDFW, and CNPS lists are provided in **Appendix A**.

Survey Methodology

An evaluation of the study area's likelihood to support special-status species and sensitive habitats was performed within the accessible portions of the parcel. The reconnaissance-level survey focused on identifying the presence or potential presence of sensitive biological resources that are regulated by federal, State, and local governments. Habitat types were characterized by dominant plant species and mapped using a combination of a Global Positioning System (GPS) unit with real-time differential correction, and aerial photographs.

ESA biologist Liza Ryan used the background species information to inform a reconnaissance-level biological resource survey of the study area on September 20, 2024. Certified ESA arborist Jessica Orsolini also conducted an arborist survey on the site on October 8, 2024. During the biological resource survey, all areas accessible within the study area were surveyed to ensure a thorough characterization of on-site biological resources. The study area considered during this reconnaissance survey is illustrated in **Figure 2**, soils are shown in **Figure 3**, and habitat types encountered are shown on **Figure 4** and discussed below. Representative photographs of the study area are provided in **Appendix B**.

Site Hydrology, Topography, and Soils

The study area parcel is located in an unincorporated area of Lake County just outside the community of Cobb, on Cobb Mountain in the Mayacamas Range. The parcel contains approximately one-quarter mile of Kelsey Creek in its upper reaches of the Clear Lake watershed (HUD 180201160303), in the eastern portion of the parcel. Kelsey Creek is a perennial stream which flows northward across the parcel ultimately draining to Clear Lake; it supports a riparian corridor on its banks and a population of Clear Lake resident rainbow trout (*Oncorhychus mykiss).* The community of Cobb and much of the surrounding countryside were burned by the destructive 2015 Valley Fire (CalFire 2024). Topography throughout most of the parcel is gently sloping, with the riparian banks steeply cut, and a steeper slope east of the creek.

Soils onsite are primarily Collayomi-Aiken-Whispering complex, 5 to 30 percent slopes (127), while the steeper area east of the creek are Collayomi-Whispering complex, 30 to 50 percent slopes (129) (USDA 2024) (**Figure 3**). These soil types are described as gravelly loam or clay loam, characteristic of montane slopes in this area with volcanic origin, but not serpentine.

Land Cover and Vegetation

The study area includes 13.13 acres within the parcel, which is bordered by rural residences, roads, and a golf course. Most of the study area is forested, though forests have been severely impacted by wildfire and tree disease. The remaining areas are covered in grassland or developed. Surrounding habitats include developed areas (residences and the golf course), grassland, and mixed oak woodland and coniferous forest. The parcel was previously privately owned and is largely undeveloped. There is one small commercial building adjacent to the highway and Golf Road, formerly used as a realty office, and two small outbuildings (sheds) nearby.

The ESA biologist mapped habitat types using a Global Positioning System unit (Eos Arrow 100), along with aerial photography and notes collected during the field reconnaissance and arborist survey. **Figure 4** shows the habitat types within the study area, and **Table 1** provides a summary of the habitat types by acreage. The dominant vegetation observed during the survey is described below for each habitat type.

TABLE 1
HABITAT TYPES BY ACREAGE

Habitat Type	Extent (acres)
Terrestrial Habitat Types	
Non-native annual grassland	0.44
Oak woodland	11.44
Riparian woodland	1.13
Disturbed	0.12
Total	**13.13**

Non-Native Annual Grassland. This habitat type is present in the western portion of the study area close to the abandoned buildings. This community is dominated by a mix of native and non-native grasses including California fescue (*Festuca californica),* and non-native wild oat (*Avena barbata*), bromes (*Bromus* sp.), and other

species interspersed with poison oak. Western redbud (*Cercis occidentalis)* shrubs are also present near Highway 175.

Oak woodland. The majority of the parcel consists of the Sawyer-Keeler-Wolff vegetation community black oak (*Quercus kelloggii)* woodland, which is described as black oak and ponderosa pine (*Pinus ponderosa)* 30-60% relative cover in the overstory (CNPS, 2024). Black oak woodland is considered a sensitive natural community in California (CDFW 2023). The forest has an overstory of ponderosa pine, many of which are in poor condition, possibly due to bark beetle infestation (Lake County 2022), as well as Douglas-fir (*Pseudotsuga menziesii*). Other trees present include canyon live oak (*Quercus chrysolepis),* California bay laurel (*Umbellularia californica),* Pacific madrone (*Arbutus menziesii*), and bigleaf maple (*Acer macrophyllum).* Closer to Kelsey Creek, valley oak (*Quercus lobata)* and Oregon ash (*Fraxinus latifolia*) trees are present. The understory in many locations consist of a thicket of invasive Himalayan blackberry (*Rubus armeniacus)*. In other locations, a mix of poison oak (*Toxicodendron diversilobum*), California blackberry*,* Scotch broom (*Cytisus scoparius*), and French broom (*Genista monspessularia*) is present, with a few manzanita (*Archtostaphylos* sp.) shrubs. On the slope above Kelsey Creek to the east, the soil is sandy with a sparse understory.

Riparian woodland. Riparian woodland is present on the banks of Kelsey Creek (see **Figure 4**). This area falls into the Sawyer-Keeler-Wolff vegetation community white alder groves (*Alnus rhombifolia),* a sensitive natural community (CNPS 2024; CDFW 2023). Mature white alder trees lined both banks of Kelsey creek with an understory of thick Himalayan blackberry. Also present are dogwood (*Cornus nuttalli)* and madrone trees, with periwinkle (*Vinca major),* poison oak, and pea plants (*Lathyrus* sp.) in the understory.

Disturbed. Ruderal disturbed habitat includes parking areas, buildings, trails and other infrastructure where human activities have removed all or most vegetation. In the study area, this habitat is prevalent surrounding the buildings in the western corner of the site, and it is covered with dirt and gravel, devoid of vegetation.

Perennial Water. Kelsey Creek is a perennial channel with a well-developed corridor of riparian woodland. Its headwaters are on Cobb Mountain to the south, and it flows northwards into Clear Lake. The creek channel is shown in **Figure 4**. At the time of the survey, the channel was flowing, approximately 3 feet wide and with 6 inches of water depth. Because of the connection to Clear Lake, a traditionally navigable water, any activities in this aquatic feature may be subject to regulation by Section 404 of the Clean Water Act, administered by the U.S. Army Corps of Engineers (USACE), or by the Regional Water Quality Control Boards (RWQCB) and CDFW, which regulate waters of the State through the California Clean Water Act (i.e., Porter-Cologne Act) and Fish and Game Code, respectively. If activities are proposed within the channel, permits may be needed from USACE and RWQCB.

Special Status Species

ESA assessed the potential for special-status plant and wildlife species to occur in the study area by completing a background review of the data sources listed above along with the reconnaissance-level field survey. A description of these species, their general habitat requirements, and an assessment of their potential to occur in the study area is provided in **Appendix C** and shown on **Figure 5**.

Bird and wildlife species observed during the survey included turkey vulture (*Cathartes aura*), dark-eyed junco (*Junco hyemalis*), lesser goldfinch (*Spinus psaltria*), white-breasted nuthatch (*Sitta carolinensis*), acorn

woodpecker (*Melanerpes formicivorus*), house finch (*Haemorhous mexicanus*), wilson's warbler (*Cardellina pusilla*), Anna's hummingbird (*Calypte anna*), red-tailed hawk (*Buteo jamaicensis*), Steller's jay (*Cyanocitta stelleri),* western flycatcher (*Empidonax difficilis*), warbling vireo (*Vireo gilvus*), ruby-crowned kinglet (*Regulus calendula*), western fence lizard (*Sceloporus occidentalis*), and black-tailed deer (tracks) (*Odocoileus hemionus*).

Critical Habitat for Listed Fish and Wildlife Species

There is no designated critical habitat for any species within the study area. Designated critical habitat for northern spotted owl (*Strix occidentalis caurina)* is located approximately 2 miles south of the study area on the slopes of Cobb Mountain.

Special Status Plants

Many of the rare plants with potential to occur in the site vicinity (see **Appendix B**) are specialized to serpentine soils, with others found in chaparral, marsh, or vernal pool habitats. None of these habitats are present onsite, though native grasses are present within the annual grassland habitat. Grassland, woodland, and riparian habitats in the study area provide potential suitable habitat for the special-status plant species, listed below. Two of these rare or special-status plant species (Baker's navarretia [*Navarretia leucocephala* ssp. *bakeri*] and Cobb Mountain lupine [*Lupinus sericatus*]) have been recorded on or near the site in the past. A protocol-level floristic survey conducted during the evident and identifiable flowering period for these species would be needed to determine presence of these species in the study area. No rare plants were seen within the site during the biological reconnaissance survey, which was conducted during September, outside the blooming period of all but one of the plants below. An assessment of the potential for individual plant species to occur on-site is provided in **Appendix B**. The following special-status plants were determined to have moderate potential to occur within or adjacent to the study area. Suitable habitat for each of these species is present in the study area, and some have recorded observations within five (5) miles of the study area (**Figure 5**):

Jepson's leptosiphon (*Leptosiphon jepsonii),* a California Rare Plant Ranking (CRPR) List 1B.2 rare plant, has moderate potential to occur in grassland or woodland in the study area.

Baker's navarretia (*Navarretia leucocephala* ssp. *bakeri),* a CRPR 1B.1 rare plant, has moderate potential to occur in grassland or woodland in the study area. This species was recorded within one mile of the site and record is presumed extant (CDFW, 2024).

Bent-flowered fiddleneck (*Amsinckia lunaris),* a CRPR 1B.2 rare plant, has moderate potential to occur in oak woodland or annual grasslands.

Narrow-anthered brodiaea (*Brodiaea leptandra),* a CRPR 1B.2 rare plant, has moderate potential to occur in woodland or grassland in the study area.

Congested-headed hayfield tarplant (*Hemizonia congesta* ssp. *congesta)* a CRPR 1B.2 rare plant, has moderate potential to occur in grassland in the study area.

Konocti manzanita (*Arctostaphylos manzanita* ssp. *elegans*), a CRPR List 1B.3 rare plant, has moderate potential to occur in woodland and coniferous forest habitats in the study area.

Cobb Mountain lupine *(Lupinus sericatus)* a CRPR List 1B.2 rare plant, has moderate potential to occur in woodlands of the study area. Historical records (1948) overlap the site and additional records are located within 2 miles (CDFW, 2024).

Special-Status Wildlife

Natural terrestrial vegetation communities in the study area provide potentially suitable habitat for several special-status wildlife species. The perennial stream Kelsey Creek, which crosses the study area, contains rainbow trout, which are not protected steelhead because they remain in inland waters throughout their lives. Several species of rare native fish, such as the Clear Lake hitch *(Lavinia exilicauda chi),* are present in Clear Lake and associated ponds, but are unlikely to spawn as far upstream as the study area (approximately 10 miles north). Thus, no special-status fish are likely to be present.

Reptiles and Amphibians. The federally proposed threatened species **northwestern pond turtle (*Actinemys marmorata)*** has moderate potential to occur in the study area in Kelsey Creek and the surrounding riparian habitat. The pond turtle is highly aquatic but may venture into grassy open areas near perennial creeks for upland nesting habitat. Several special-status amphibians (non-listed species of special concern) also have a moderate potential to occur in the study area (CDFW, 2024), as discussed below: **Red-bellied newt (*Taricha rivularis*)** is found in coastal drainages as far south as Santa Clara County. It lives in moist terrestrial environments and breeds in streams with moderate flow and clean, rocky substrate. **California giant salamander (*Dicamptodon ensatus*)** is found in wet coastal forests near streams as far south as Monterey and east to Napa. Larvae are reared in clear streams or ponds, and adults dwell in wet forests under rocks and logs near water. **Foothill yellow-legged frog *(Rana boylii*)** is found in the coast range in partly shaded shallow streams with a rocky substrate.

These special-status amphibians, as well as the pond turtle, have been recorded historically either onsite or in the immediate vicinity, in Forest Lake upstream. Additional records are located to the north, northwest, and south, dating from the early 20th century to the 1980s (CDFW 2024). Because of these records and the presence of suitable habitat, these wildlife species may have moderate potential within Kelsey Creek, its riparian corridor, or in the surrounding forested uplands.

Raptors and Nesting Birds. Potential nesting and foraging habitat for numerous types of birds is available in and around the study area. No special-status nesting birds were observed during site surveys, but several common bird species were observed, including numerous Steller's jays and acorn woodpeckers. In addition to common migratory nesting birds, riparian and woodland trees in and adjacent to the study area could provide nesting habitat for California fully protected species **white-tailed kite (*Elanus leucurus*),** watch list raptor species **Cooper's hawk (*Accipiter cooperii*),** and **sharp-shinned hawk (*Accipiter striatus*)**. The species of special concern **purple martin (*Progne subis)*** has a known population on Cobb Mountain and in the nearby Geysers, and also has moderate potential to nest in conifers within the study area.

Mammals. The study area contains large mature trees that may provide roosting habitat for special-status bats, including species of special concern **pallid bat (*Antrozous pallidus*), western red bat (*Lasiurus blossevillii),*** and **Townsend's big-eared bat (*Corynorhinus townsendii*).** These species may roost in large trees, or in structures on the site, and may forage for insect prey over Kelsey Creek. An outbuilding near the creek was observed to contain an old bird's nest, and would also provide suitable bat habitat, though no guano or staining

was seen during the survey. No terrestrial special-status mammals were considered to have moderate or higher potential to occur onsite.

Lake County Regulations

Lake County does not have a tree preservation ordinance, but has a resolution on oak woodlands management (Lake County 1995). The Oak Woodland Management Policy requires monitoring of oak woodland canopy cover and reporting to the Board of Supervisors every 5 years. with significant reduction in cover requiring notification within 30 days. The monitoring committee also provides landowner education and preservation incentives.

The Lake County General Plan (2008) Chapter 9 supports protection of endangered species, environmentally sensitive areas, riparian corridors, wetlands, native vegetation and open space; and requires biological studies and wetland delineations for development sensitive areas, and appropriate mitigation.

Impacts and Proposed Mitigation Measures

Potential impacts to biological resources within or adjacent to the Project site (see Figure 2) may occur directly or indirectly during construction activities that affect habitat areas, such as vegetation removal, grading, demolition, and revegetation. Proposed mitigation measures to reduce potential impacts to a less-than-significant level are provided, as appropriate.

Special-Status Species

Rare Plants

Up to seven rare plant species have potential to occur on the Project site in grassland, riparian woodland, and/or forest habitat. No rare plants have potential to occur in disturbed areas. Construction, including vegetation clearing, has the potential to harm or kill individual rare plants or groups of such plants. Prior to construction in potential rare plant habitat, preconstruction rare plant surveys should be conducted during the appropriate blooming period for the species. **Mitigation Measure (MM) BIO-1 Protection of Rare Plants** would reduce potential impacts on rare plants to a less-than-significant level.

MM-BIO-1: Protection of Rare Plants.

- Within one month prior to construction, a qualified biologist shall conduct a focused survey for rare plant species with potential to be present during their suitable blooming period. If no special-status plants are observed, no further action is required. If any special-status plant species are observed, the plants will be avoided with a suitable buffer, determined in coordination with CDFW. The buffer zone shall be clearly demarcated using exclusion fencing.
- If establishing an avoidance buffer is not feasible, individual plants shall be transplanted to an area with suitable physical and biological conditions outside of the work area, according to a Rare Plant Relocation Plan (Relocation Plan), to be prepared by the County or its contractor, and reviewed and approved by CDFW. The Relocation Plan will include regular monitoring and weeding for a period of five years, as well as adaptive management criteria, including additional monitoring, weeding, watering, or replanting, if success criteria are not met after the five-year management period.

Terrestrial Wildlife

Construction and operation of the Project could impact special-status reptile and amphibian species including foothill yellow legged frog, California giant salamander, red-bellied newt, and northwestern pond turtle, if present, due to injury or mortality from construction equipment, traffic, ground disturbance, occupied vegetation removal, or by pollution and sediment delivery into aquatic habitat. Measures to reduce potential impacts to reptile and amphibian species through pre-construction surveys, relocation if necessary, and installation of fencing, would protect special-status reptiles and amphibians with potential to occur in the Project site. Following construction, the park amenities would not be expected to adversely impact terrestrial species populations. **MM-BIO-2 Protection of Terrestrial Wildlife** below would reduce potential impacts on reptiles and amphibians to a less-than-significant level.

MM-BIO-2: Protection of Terrestrial Wildlife.

- To avoid impacts to foothill yellow-legged frog, California giant salamander, red-bellied newt and northwestern pond turtle, if present, the County would avoid ground disturbance to riparian and channel habitat to the extent feasible. Where avoidance is not feasible, the footprint of such activities shall be minimized.

- Where riparian habitat cannot be avoided, vegetation shall be removed from the ground disturbance work area, plus a 10-foot buffer around the area, following a pre-construction survey by a qualified biologist, with mechanized hand tools or by another method approved by the USFWS and CDFW. Vegetation height shall be maintained at or below five (5) inches above ground. All vegetation removal shall be conducted under the supervision of a qualified biologist.

- Prior to starting Project activities in or near riparian habitat, a CDFW-approved qualified biologist shall conduct surveys for foothill yellow-legged frog, northwestern pond turtle, and other special-status amphibians using CDFW-approved methodology. The results of the surveys shall be shared with CDFW and Project activities shall not commence without written acceptance of findings. If northwestern pond turtle or their nests are detected at any time, CDFW shall be notified immediately, and the qualified biologist shall relocate the turtle to appropriate habitat within the stream it was found. If northwestern pond turtle or their nests are found the County shall prepare and implement a Turtle Habitat Improvement Plan, if required by CDFW. If foothill yellow-legged frog or their eggs are found, they shall be avoided or allowed to leave the area, and the County shall prepare and implement a Foothill yellow-legged frog Habitat Improvement Plan, if required by CDFW.

- In habitat areas for these species, the County shall install exclusionary fencing made of a smooth material that does not allow wildlife to climb or pass through, of a minimum above-ground height of 30 inches, and the bottom should be buried to a depth of at least six (6) inches so that individuals cannot crawl under the fence. Installation of the fence shall be monitored by a qualified biologist with experience with these species, who will check the fence alignment prior to vegetation clearing and fence installation to ensure no sensitive species are present, and relocate any individuals within the fenced area to appropriate habitat outside the work area.

Nesting Birds and Roosting Bats

Special-status birds including white-tailed kite, and other nesting birds protected by the MBTA and California Fish & Game Code, may be present in the Project site in suitable habitat for nesting and/or roosting and could be harmed by Project activities, including grading, vegetation removal, and equipment traffic. Bat species, including

special-status bats and other bats protected under California Fish & Game Code, may roost in large trees, and may be injured or killed during vegetation removal. Nesting birds may be injured or killed if trees are shrubs are removed during nest season, or may abandon nests with eggs or young, if noise and human disturbance occur in close proximity. Such impacts that result in nest failure or mortality would be significant. **MM-BIO-3** and **MM-BIO-4** below would require pre-construction bird and bat surveys with avoidance of active nests and maternity roosts, and bat-safe tree removal procedures. Implementation of these measures would reduce impacts on nesting birds and roosting bats to a less-than-significant level.

MM-BIO-3: Nesting Bird Protection.

- Work initiation shall avoid the nesting season if possible. If work must commence during nesting season, no more than 2 (two) weeks prior to any tree trimming or vegetation removal in the bird nesting season (February 1 to August 31), the County shall retain a qualified biologist to conduct a nesting bird survey of the Project where work will take place, and all areas within 300 feet. Active bird nest sites shall be designated as "Ecologically Sensitive Areas" (ESA) and protected (while occupied) during Project work by demarking a "No Work Zone" buffer around each nest site.

- Buffer distances for bird nests shall be site specific and an appropriate distance, as determined by a qualified biologist. The buffer distances shall be specified to protect the bird's normal behavior thereby preventing nesting failure or abandonment. The buffer distance recommendation shall be developed after field investigations that evaluate the bird(s) apparent distress in the presence of people or equipment at various distances. Abnormal nesting behaviors which may cause reproductive harm include, but are not limited to, defensive flights/vocalizations directed towards Project personnel, standing up from a brooding position, and flying away from the nest. The qualified biologist shall have authority to order the cessation of all nearby Project activities if the nesting birds exhibit abnormal behavior which may cause reproductive failure (nest abandonment and loss of eggs and/or young) until an appropriate buffer is established.

- The qualified biologist shall monitor the behavior of the birds (adults and young, when present) at the nest site to ensure that they are not disturbed by Project work. Nest monitoring shall continue during Project work until the young have fully fledged (have completely left the nest site and are no longer being fed by the parents), as determined by the qualified biologist, unless otherwise approved in writing by CDFW.

MM-BIO-4: Bat Roost Protection.

- Work initiation shall avoid the roosting season if possible. If work must commence during roosting season, before any ground-disturbing activity, the County shall retain a qualified bat biologist to conduct surveys of all potential bat habitat, including areas suitable for maternity roosts and/or winter hibernacula prior to initiation of construction activities. Prior to any tree removal, a qualified bat biologist shall conduct a habitat assessment for bats. The habitat assessment shall be conducted a minimum of 15 days prior to tree removal and shall include a visual inspection of potential roosting features (e.g., cavities, crevices in wood and bark, or exfoliating bark for colonial species, and suitable canopy for foliage-roosting species). If suitable habitat trees are found, they shall be flagged or otherwise clearly marked, CDFW shall be notified immediately, and tree trimming or removal shall not proceed without approval in writing from CDFW. Trees may be removed only if: a) presence of bats is presumed, or documented during the surveys described below, in trees with suitable bat habitat, and removal using the two-step removal process detailed below occurs only during seasonal periods of bat activity from

approximately March 1 through April 15, or September 1 through October 15, or b) after a qualified bat biologist, under prior written approval of the proposed survey methods by CDFW, conducts night emergence surveys or complete visual examination of roost features that establish absence of roosting bats. Two-step tree removal shall be conducted over two consecutive days, as follows: 1) the first day (in the afternoon), under direct supervision and instruction by a qualified bat biologist with experience conducting two-step tree removal limbs and branches shall be removed by a tree cutter using chainsaws only. Limbs with cavities, crevices or deep bark fissures shall be avoided, and 2) the second day the entire tree shall be removed.

Sensitive Natural Communities, Including Wetlands

Kelsey Creek is a Water of the U.S.; riparian woodland is present along the banks, containing primarily valley oak, white alder, and bay laurel trees with an understory of blackberry. The creek channel is regulated by the Army Corps of Engineers and also regulated as Waters of the State by the Regional Water Quality Control Board, and CDFW within the top-of-bank. If riparian woodland is removed during construction, the loss would represent a significant impact. Temporarily impacted areas would subsequently be revegetated using native species. Permanent impacts would be mitigated according to the terms of required permits, including compensatory mitigation at a specified ratio of at least 1:1.

In addition, waters may be indirectly impacted through sedimentation from dust and debris raised by construction equipment. Drainages and riparian vegetation can be harmed by such changes in water quality, which may alter important habitat for wildlife. These impacts are potentially significant but would be minimized by adherence to water quality measures and best management practices to reduce erosion and sediment delivery.

The majority of the Project site consists of oak woodland, primarily black oak with ponderosa pine overstory, with canyon live oak and valley oak interspersed. Lake County has guidelines protecting oak woodlands; removal of oak trees to construct park amenities has potential to significantly impact this oak woodland community. Oak woodland impacts would be minimized by avoiding tree removal where possible, and compensating for loss of mature trees by replanting oaks.

MM-BIO-5 avoids and minimizes, where feasible, Project effects on sensitive natural communities and, where unavoidable, requires compensatory mitigation through enhancement and success monitoring or mitigation credit purchase. **MM-BIO-6** includes habitat restoration measures for sensitive natural communities, and adaptive management to ensure restoration goals are met. For riparian areas, these measures would need to incorporate measures from regulatory agency permits to achieve restoration goals. The measure below requires preparing a habitat restoration and monitoring plan prior to restoration. Management goals would be defined (e.g., to manage invasive plant encroachment), and future management actions may include replanting, invasive species removal, fencing, irrigation, or enhanced erosion buffers.

MM-BIO-5: Protection of Sensitive Natural Communities.

- The County shall require any impact to oak woodland, riparian and wetland vegetation or waters of the U.S/State be minimized where unavoidable by siting construction staging and access areas outside sensitive natural communities and by utilizing previously disturbed upland areas for staging. Certified weed-free permanent and temporary erosion control measures (e.g., fabric wattles) shall be used to minimize erosion and sedimentation during and after construction. Temporary impacts on sensitive natural communities shall be restored by revegetation with

native species. Revegetated sensitive natural areas shall be monitored for a five-year period to ensure success, according to Mitigation Measure BIO-6.

- Any permanently impacted riparian or wetland areas shall be mitigated in accordance with specifications of applicable regulatory agency permits; including compensatory mitigation, if required, with replacement of like habitat on- or off-site, at a minimum 1.1:1 ratio, or as otherwise specified by applicable resource agency permit(s). Oak woodland areas shall be mitigated at a 1:1 ratio, or as specified by the County Board of Supervisors.

- During construction and restoration, to avoid the spread of invasive plant species and pathogens, the County shall ensure all vehicles and equipment entering the site shall be clean of invasive weeds. All construction equipment shall be washed thoroughly to remove all dirt, plant, and other foreign material prior to entering the Project site. Particular attention shall be shown to the under-carriage and any surface where soil containing invasive weeds and exotic seeds may exist. Arrangements shall be made for inspections of each piece of equipment before entering the Project site to ensure all equipment has been properly washed. Equipment found operating that has not been properly washed shall be shut down and may be subject to citation:

  1) Certified weed-free permanent and temporary erosion control measures shall be implemented to minimize erosion and sedimentation during and after construction.

  2) The Project shall conform to applicable federal, state, and local seed and noxious (invasive) weed laws.3) Nursery operations where plants are stored, propagated, or purchased must certify implementation of best management practices to reduce pest and pathogen contamination within their nursery.4) Disturbed and decompacted areas outside the restoration area shall be revegetated with locally native vegetation. Revegetated areas shall be protected and tended, including watering when needed, until restoration criteria specified by regulatory agency-issued permits is complete.5) All tree removal and pruning activities shall include measures to avoid the spread of the Sudden Oak Death (SOD) pathogen. Such measures may include, but are not limited to, the following:

     i. As a precaution against spreading the pathogen, clean and disinfect pruning tools after use on confirmed or suspected infested trees or in known infested areas. Sanitize tools before pruning healthy trees or working in pathogen-free areas. Clean chippers and other vehicles of mud, dirt, leaves, organic material, and woody debris before leaving a site known to have SOD and before entering a site with susceptible hosts.
     ii. Inform crews about the arboricultural implications of SOD and sanitation practices when they are working in infested areas.
     iii. Provide crews with sanitation kits containing chlorine bleach, scrub brush, metal scraper, boot brush, and plastic gloves.
     iv. Sanitize shoes, pruning gear, and other equipment before working in an area with susceptible species.
     v. When possible, work on SOD-infected and susceptible species during the dry season (June–October). When working in wet conditions, keep equipment on paved, graveled, or dry surfaces and avoid mud. Work in disease-free areas before proceeding to infested areas.
     vi. If possible, do not collect soil or plant material (wood, brush, leaves, and litter) from host trees in the quarantine area. Within the quarantine area, host material (e.g., wood, bark, brush, chips, leaves, or firewood) from tree removals or pruning of

symptomatic or non-symptomatic host plants should remain onsite to minimize pathogen spread.
vii. Use all reasonable methods to sanitize personal gear and crew equipment before leaving a SOD infested site. Scrape, brush, and/or hose off accumulated soil and mud from clothing, gloves, boots, and shoes. Remove mud and plant debris by blowing out or power washing chipper trucks, chippers, bucket trucks, fertilization and soil aeration equipment, cranes, and other vehicles. Restrict the movement of soil and leaf litter under and around infected trees as spores may be found there.
viii. Tools used in tree removal/pruning may become contaminated and should be disinfected with alcohol or chlorine bleach.

MM-BIO-6: Habitat Restoration and Monitoring.

- Prior to construction, the County shall obtain all required environmental permits, including Clean Water Act Water Quality Certification (Section 401), Federal and state permits for wetlands (Section 404), and CDFW Lake and Streambed Alteration Agreement, and adhere to the conditions of each.

- At least 30 days prior to the completion of Project activities, the Permittee shall submit a Riparian Restoration and Enhancement Plan (Plan) to CDFW for review and written approval. No Project activities shall commence until the Plan is approved by CDFW in writing. The Plan shall detail compensation for permanent impacts to Kelsey Creek and the surrounding riparian habitat in the form of restoration or enhancement of riparian habitat on-site, or off-site as close to the Project site as possible, and within the same watershed. The Plan shall also describe the onsite restoration of temporary impacts to riparian habitat. The Plan shall also include monitoring and success criteria. The Plan shall be implemented within the same calendar year as the completion of Project activities unless otherwise approved in writing by CDFW.

- Restoration and monitoring shall be guided by a qualified biologist experienced in habitat restoration for riparian and oak woodlands. Restoration shall include protocols for replanting of native vegetation removed prior to or during construction, and management and monitoring of the plants to ensure replanting success. The following measures shall apply to site restoration:

    - Riparian areas impacted from construction-related activity shall be replanted or reseeded with locally collected and grown native shrubs and herbaceous species \ under guidance from a qualified restoration biologist. Riparian trees shall be replanted with native riparian tree species at a 1:1 ratio, or as specified in applicable agency permits.
    - For oak woodland areas, removal of oak (*Quercus* spp.) trees in fair or good health with a dbh greater than five inches, or adverse effects to trees from ground disturbance within the critical root zone, shall require replacement with native oak trees, at a 1:1 ratio, or as specified by the County Board of Supervisors.
    - To ensure a successful revegetation effort, all plants shall be monitored and maintained as necessary for five years. At the end of the five (5) years of monitoring, with at least three years without supplemental irrigation, each category of plantings (e.g., oaks, other trees, shrubs, etc.) shall have a minimum of 85% survival at the end of the minimum monitoring period and plantings shall attain 70% cover after three (3) years and 75% cover after five (5) years, unless approved in writing by CDFW. Survival and cover criteria shall both be required unless the herbaceous or spreading plants cannot be differentiated by individual, in which case only cover success criteria are required.

- Replacement tree plantings shall consist of 5-gallon or greater saplings and locally collected seeds, stakes, or other suitable nursery stock as appropriate, and shall be native species to the area adapted to the lighting, soil, and hydrological conditions at the replanting site. If acorns are used for oak tree replanting, each planting will include a minimum of three acorns planted at an approximately two inch depth to minimize predation risk. Large acorns shall be selected for plantings. Replacement oaks shall come from nursery stock grown from locally-sourced acorns, or from acorns gathered locally, preferably from the same watershed in which they are planted.

Wildlife Corridors

Kelsey Creek and its associated riparian corridor may provide an important corridor for passage of terrestrial and aquatic species. Outside of the riparian zone, the parcel is surrounded by major roadways, which discourage wildlife movement, but the creek passes under Highway 175 and across the site. The Project site is close to Cobb Mountain, an area of irreplaceable and essential corridors. It is considered to be a "Connection with Implementation Flexibility" (CDFW 2023). Project construction would avoid impeding Kelsey Creek or working within the riparian corridor. Thus, impacts on wildlife movement would be less than significant, with no mitigation required.

Local Ordinances

Lake County does not have a tree preservation ordinance, but has a resolution on oak woodlands management (Lake County 1995) to protect oaks. Tree removal at the Project site would comply with this ordinance, as well as with all mitigation for protection for nesting birds and roosting bats, as well as terrestrial species, and with for protection of riparian and wetland trees. Removal of mature oak trees at the Project site would be a potentially significant impact, as would impacts to riparian trees regulated by CDFW. Therefore, the Project would avoid removal of oaks and riparian trees or provide compensatory riparian trees as required in permits and included in **MM-BIO-6,** described above. With the implementation of this mitigation measure, impacts from tree removal would be less than significant, with no further mitigation required.

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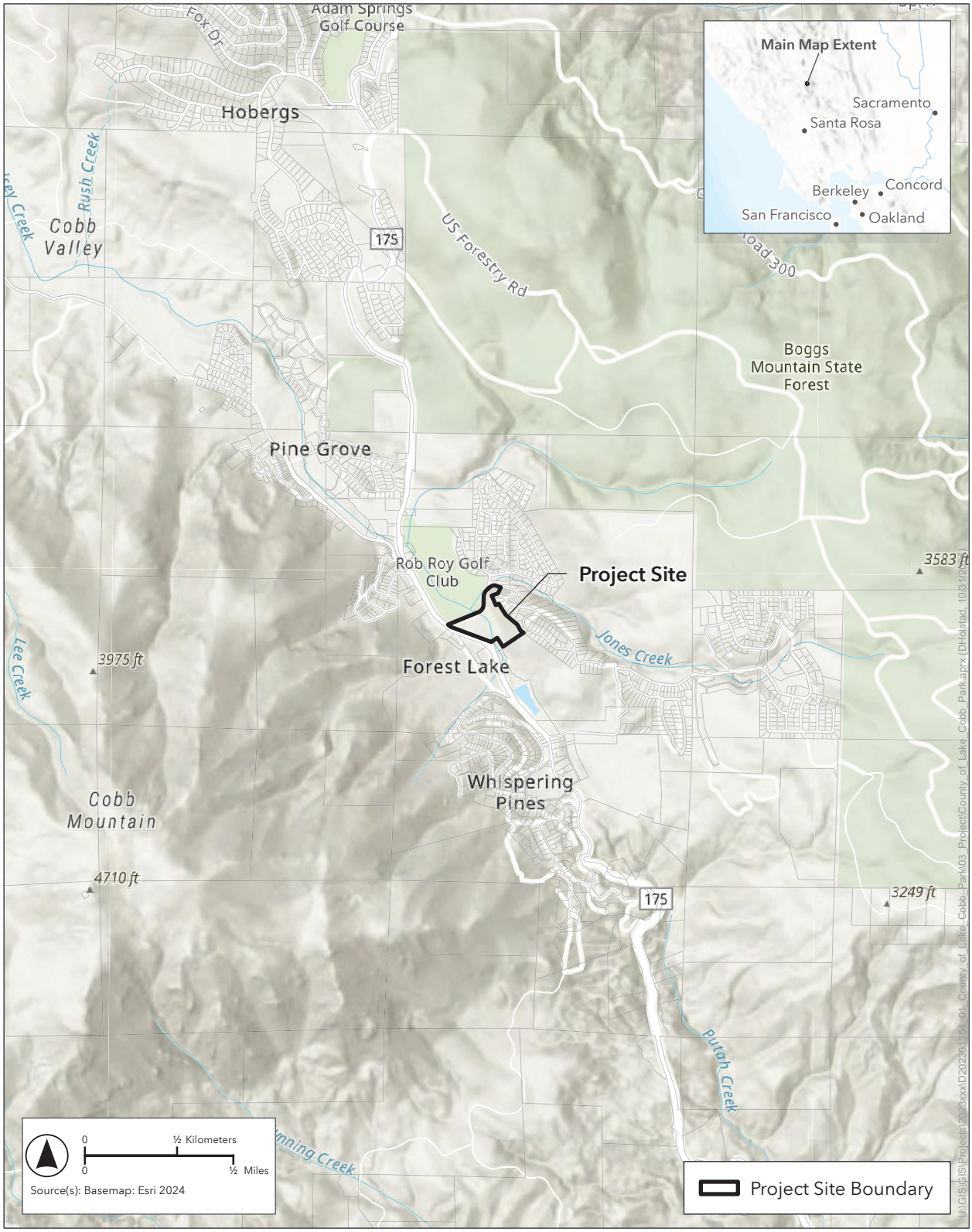


Figure 1
Site Location
Cobb Community Park
County of Lake

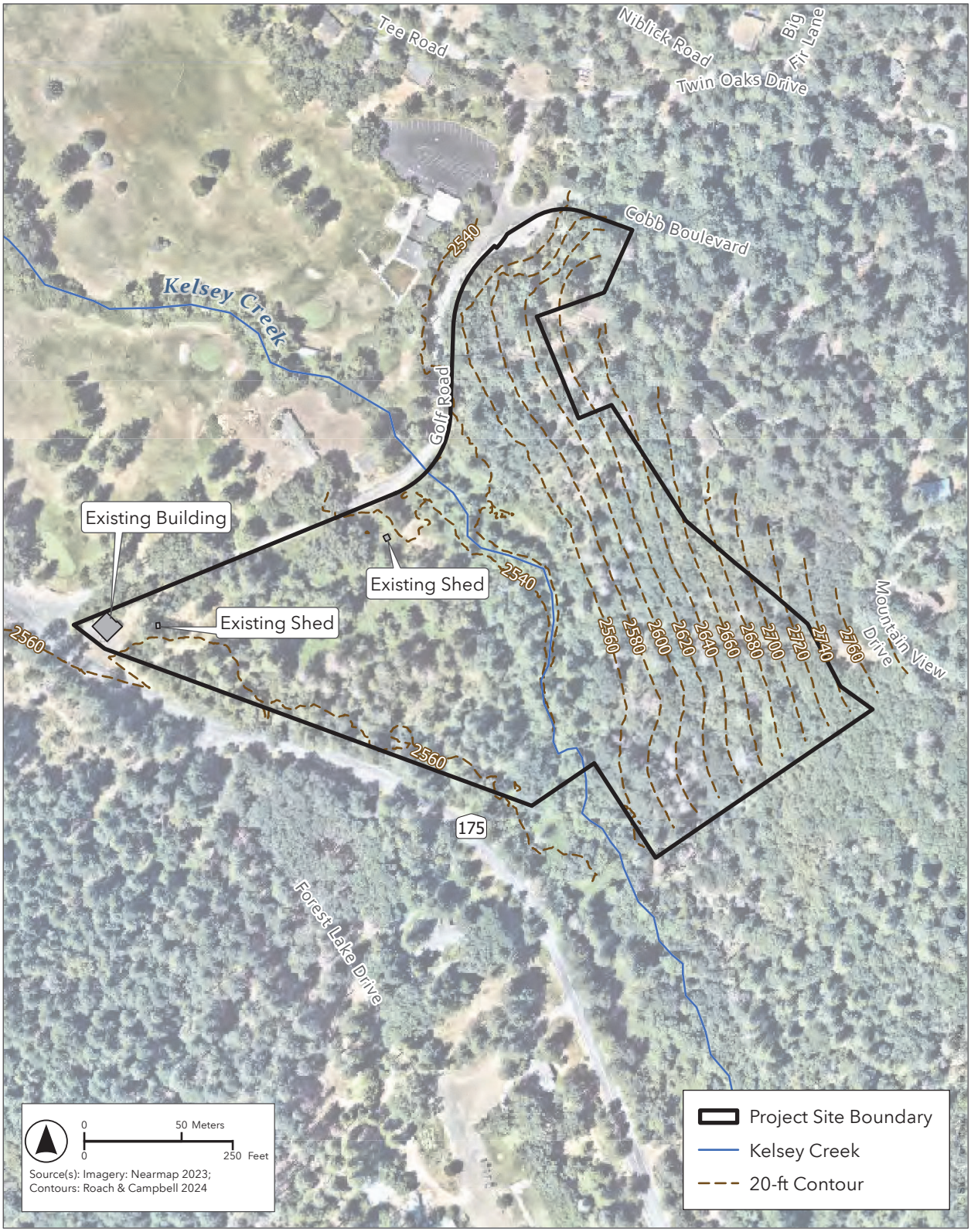


Figure 2
Study Area
Cobb Community Park
County of Lake

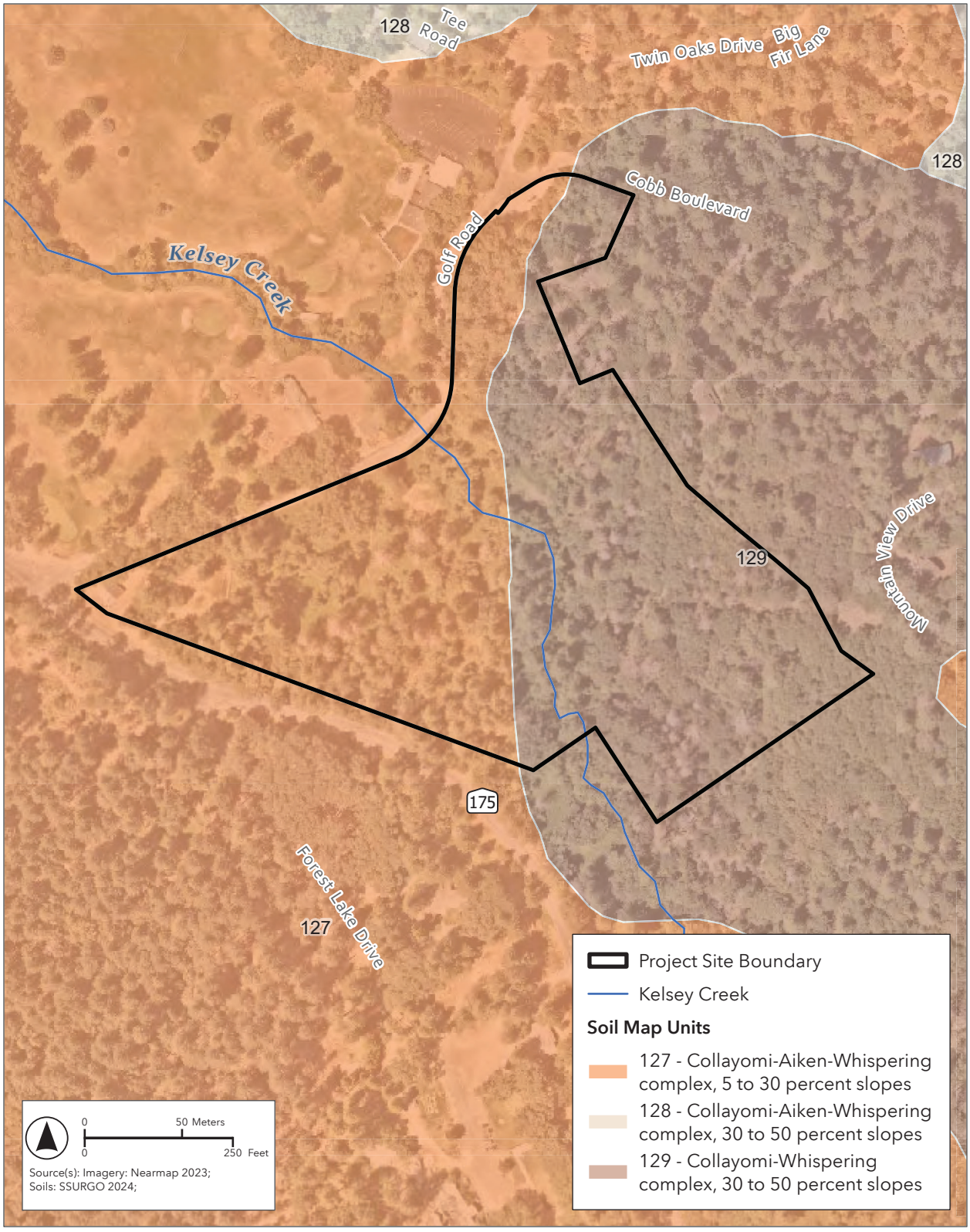


Figure 3
Soil Map Units
Cobb Community Park
County of Lake

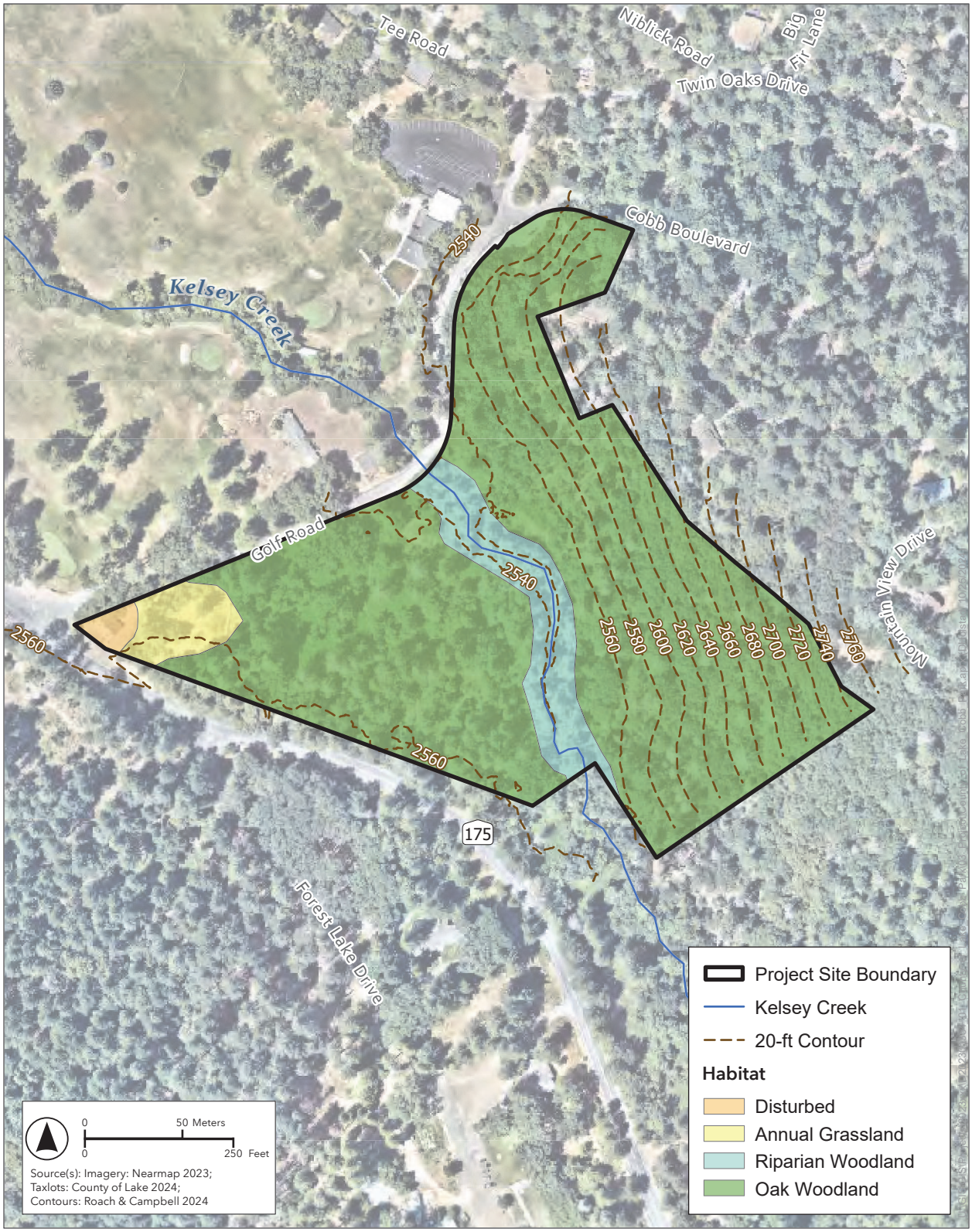


Figure 4
Vegetation Communities
Cobb Community Park
County of Lake

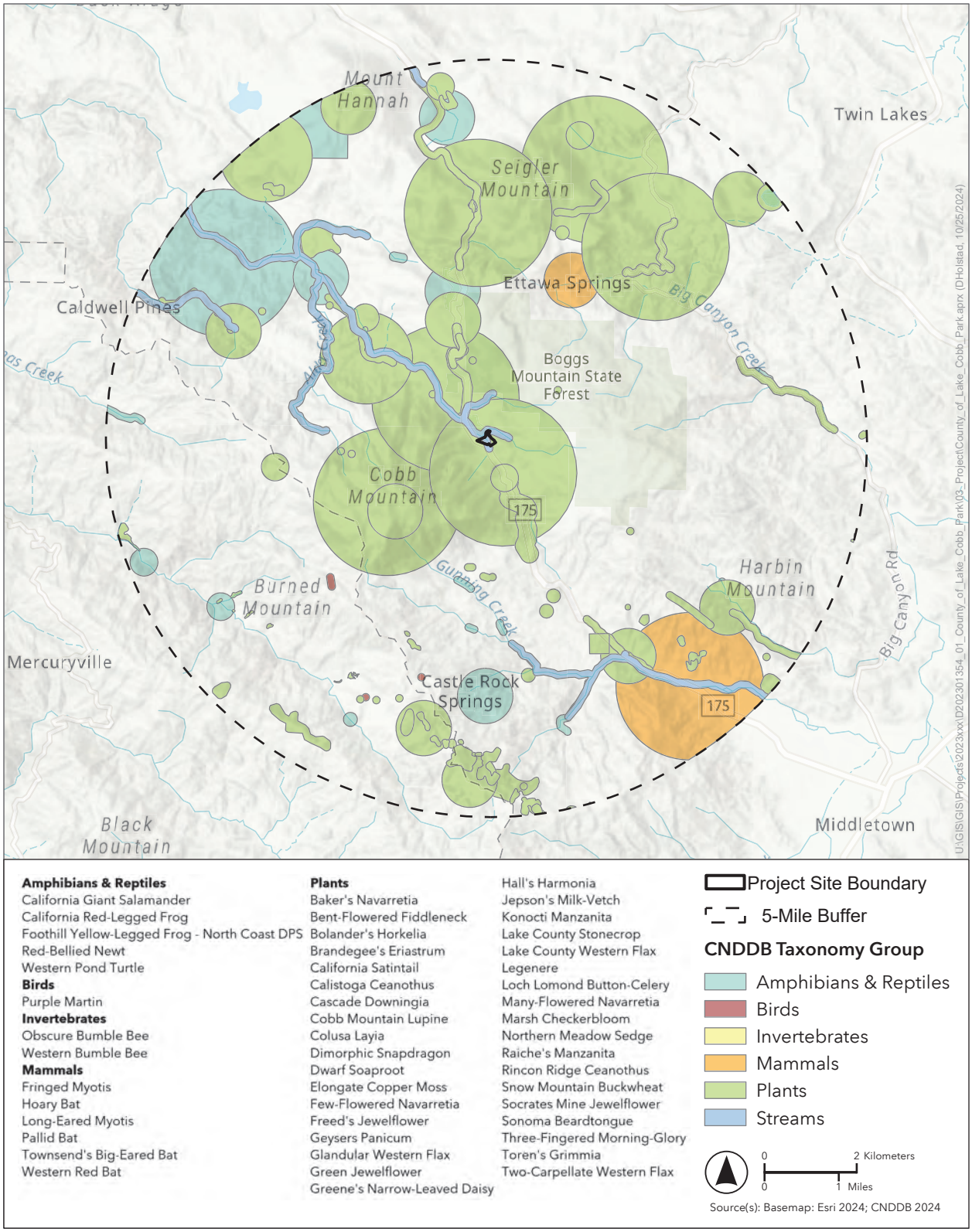


Figure 5
Special-status Plant and Wildlife Occurrences within 5 Miles of the Site
Cobb Community Park
County of Lake

APPENDIX A

USFWS, CDFW, and CNPS Species Lists

Selected Elements by Element Code

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Whispering Pines (3812276) OR The Geysers (3812277) OR Lower Lake (3812285) OR Kelseyville (3812287) OR Detert Reservoir (3812265) OR Mount St. Helena (3812266) OR Jimtown (3812267) OR Middletown (3812275) OR Clearlake Highlands (3812286))

Element Code	Species	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
AAAAF02020	***Taricha rivularis*** red-bellied newt	None	None	G2	S2	SSC
AAAAH01020	***Dicamptodon ensatus*** California giant salamander	None	None	G2G3	S2S3	SSC
AAABH01022	***Rana draytonii*** California red-legged frog	Threatened	None	G2G3	S2S3	SSC
AAABH01051	***Rana boylii pop. 1*** foothill yellow-legged frog - north coast DPS	None	None	G3T4	S4	SSC
ABNKC01010	***Pandion haliaetus*** osprey	None	None	G5	S4	WL
ABNKC06010	***Elanus leucurus*** white-tailed kite	None	None	G5	S3S4	FP
ABNKC10010	***Haliaeetus leucocephalus*** bald eagle	Delisted	Endangered	G5	S3	FP
ABNKC22010	***Aquila chrysaetos*** golden eagle	None	None	G5	S3	FP
ABNKD06071	***Falco peregrinus anatum*** American peregrine falcon	Delisted	Delisted	G4T4	S3S4	
ABNKD06090	***Falco mexicanus*** prairie falcon	None	None	G5	S4	WL
ABNRB02022	***Coccyzus americanus occidentalis*** western yellow-billed cuckoo	Threatened	Endangered	G5T2T3	S1	
ABNSB10010	***Athene cunicularia*** burrowing owl	None	Candidate Endangered	G4	S2	SSC
ABPAU01010	***Progne subis*** purple martin	None	None	G5	S3	SSC
ABPBXB0020	***Agelaius tricolor*** tricolored blackbird	None	Threatened	G1G2	S2	SSC
AFCHA0209G	***Oncorhynchus mykiss irideus pop. 8*** steelhead - central California coast DPS	Threatened	None	G5T3Q	S3	SSC
AFCJB19011	***Lavinia exilicauda chi*** Clear Lake hitch	Proposed Threatened	Threatened	G4T1	S1	
AFCJB25010	***Mylopharodon conocephalus*** hardhead	None	None	G3	S3	SSC
AFCQB07010	***Archoplites interruptus*** Sacramento perch	None	None	G1	S1	SSC
AFCQK02011	***Hysterocarpus traskii pomo*** Russian River tule perch	None	None	G5T4	S4	SSC

Element Code	Species	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
AFCQK02013	***Hysterocarpus traskii lagunae*** Clear Lake tule perch	None	None	G5T3	S3	SSC
AMACC01070	***Myotis evotis*** long-eared myotis	None	None	G5	S3	
AMACC01090	***Myotis thysanodes*** fringed myotis	None	None	G4	S3	
AMACC02010	***Lasionycteris noctivagans*** silver-haired bat	None	None	G4	S3S4	
AMACC05032	***Lasiurus cinereus*** hoary bat	None	None	G3G4	S4	
AMACC05080	***Lasiurus frantzii*** western red bat	None	None	G4	S3	SSC
AMACC08010	***Corynorhinus townsendii*** Townsend's big-eared bat	None	None	G4	S2	SSC
AMACC10010	***Antrozous pallidus*** pallid bat	None	None	G4	S3	SSC
AMAFJ01010	***Erethizon dorsatum*** North American porcupine	None	None	G5	S3	
AMAJF01020	***Pekania pennanti*** Fisher	None	None	G5	S2S3	SSC
ARAAD02031	***Actinemys marmorata*** northwestern pond turtle	Proposed Threatened	None	G2	SNR	SSC
CARA2422CA	***Central Valley Drainage Rainbow Trout/Cyprinid Stream*** Central Valley Drainage Rainbow Trout/Cyprinid Stream	None	None	GNR	SNR	
CARA2520CA	***Clear Lake Drainage Resident Trout Stream*** Clear Lake Drainage Resident Trout Stream	None	None	GNR	SNR	
CARA2530CA	***Clear Lake Drainage Cyprinid/Catostomid Stream*** Clear Lake Drainage Cyprinid/Catostomid Stream	None	None	GNR	SNR	
CARA2550CA	***Clear Lake Drainage Seasonal Lakefish Spawning Stream*** Clear Lake Drainage Seasonal Lakefish Spawning Stream	None	None	GNR	SNR	
CTT44100CA	***Northern Vernal Pool*** Northern Vernal Pool	None	None	G2	S2.1	
CTT44131CA	***Northern Basalt Flow Vernal Pool*** Northern Basalt Flow Vernal Pool	None	None	G3	S2.2	
CTT44133CA	***Northern Volcanic Ash Vernal Pool*** Northern Volcanic Ash Vernal Pool	None	None	G1	S1.1	
CTT52410CA	***Coastal and Valley Freshwater Marsh*** Coastal and Valley Freshwater Marsh	None	None	G3	S2.1	
ICBRA06010	***Linderiella occidentalis*** California linderiella	None	None	G2G3	S2S3	

Element Code	Species	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
ICMAL05D60	***Stygobromus cherylae*** Barr's amphipod	None	None	G1	S1	
ICMAL34010	***Calasellus californicus*** An isopod	None	None	G2	S3	
IICOL5A010	***Dubiraphia brunnescens*** brownish dubiraphian riffle beetle	None	None	G1	S1	
IICOL5V010	***Hydrochara ricksecker*** Ricksecker's water scavenger beetle	None	None	G2?	S2?	
IICOLX6010	***Trachykele hartmani*** serpentine cypress wood-boring beetle	None	None	G1	S1	
IIHEM07010	***Saldula usingeri*** Wilbur Springs shorebug	None	None	G2	S2	
IIHYM24252	***Bombus occidentalis*** western bumble bee	None	Candidate Endangered	G3	S1	
IIHYM24260	***Bombus pensylvanicus*** American bumble bee	None	None	G3G4	S2	
IIHYM24380	***Bombus caliginosus*** obscure bumble bee	None	None	G2G3	S1S2	
IIHYM68020	***Hedychridium milleri*** Borax Lake cuckoo wasp	None	None	G1	S1	
IMBIV19010	***Gonidea angulata*** western ridged mussel	None	None	G3	S2	
IMGASJ0F40	***Pyrgulopsis ventricosa*** Clear Lake pyrg	None	None	G1	S1	
NBMUS32330	***Grimmia torenii*** Toren's grimmia	None	None	G2	S2	1B.3
NBMUS4Q022	***Mielichhoferia elongata*** elongate copper moss	None	None	G5	S3S4	4.3
PDAPI0Z0W0	***Eryngium constancei*** Loch Lomond button-celery	Endangered	Endangered	G1	S1	1B.1
PDAST3M5G0	***Erigeron greenei*** Greene's narrow-leaved daisy	None	None	G2?	S2?	1B.2
PDAST4R0W1	***Hemizonia congesta ssp. congesta*** congested-headed hayfield tarplant	None	None	G5T2	S2	1B.2
PDAST5L010	***Lasthenia burkei*** Burke's goldfields	Endangered	Endangered	G1	S1	1B.1
PDAST5N0F0	***Layia septentrionalis*** Colusa layia	None	None	G2	S2	1B.2
PDAST650A0	***Harmonia hallii*** Hall's harmonia	None	None	G2?	S2?	1B.2
PDBOR01070	***Amsinckia lunaris*** bent-flowered fiddleneck	None	None	G3	S3	1B.2

Element Code	Species	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
PDBOR0A0H2	***Cryptantha dissita*** serpentine cryptantha	None	None	G3	S3	1B.2
PDBRA2G071	***Streptanthus brachiatus ssp. hoffmanii*** Freed's jewelflower	None	None	G2T2	S2	1B.2
PDBRA2G072	***Streptanthus brachiatus ssp. brachiatus*** Socrates Mine jewelflower	None	None	G2T1	S1	1B.2
PDBRA2G0J4	***Streptanthus glandulosus ssp. hoffmanii*** Hoffman's bristly jewelflower	None	None	G4T2	S2	1B.3
PDBRA2G0S1	***Streptanthus morrisonii ssp. elatus*** Three Peaks jewelflower	None	None	G2T1	S1	1B.2
PDBRA2G120	***Streptanthus vernalis*** early jewelflower	None	None	G1	S1	1B.2
PDBRA2G510	***Streptanthus hesperidis*** green jewelflower	None	None	G2G3	S2S3	1B.2
PDCAB01010	***Brasenia schreberi*** watershield	None	None	G5	S3	2B.3
PDCAM060E0	***Downingia willamettensis*** Cascade downingia	None	None	G4	S2	2B.2
PDCAM0C010	***Legenere limosa*** legenere	None	None	G2	S2	1B.1
PDCON04032	***Calystegia collina ssp. oxyphylla*** Mt. Saint Helena morning-glory	None	None	G4T3	S3	4.2
PDCON04036	***Calystegia collina ssp. tridactylosa*** three-fingered morning-glory	None	None	G4T1T2	S1S2	1B.2
PDCPR07080	***Viburnum ellipticum*** oval-leaved viburnum	None	None	G4G5	S3	2B.3
PDCRA0F020	***Sedella leiocarpa*** Lake County stonecrop	Endangered	Endangered	G1	S1	1B.1
PDERI041G2	***Arctostaphylos stanfordiana ssp. raichei*** Raiche's manzanita	None	None	G3T2	S2	1B.1
PDERI04271	***Arctostaphylos manzanita ssp. elegans*** Konocti manzanita	None	None	G5T3	S3	1B.3
PDFAB08012	***Amorpha californica var. napensis*** Napa false indigo	None	None	G4T2	S2	1B.2
PDFAB0F7E1	***Astragalus rattanii var. jepsonianus*** Jepson's milk-vetch	None	None	G4T3	S3	1B.2
PDFAB2B3J0	***Lupinus sericatus*** Cobb Mountain lupine	None	None	G2?	S2?	1B.2
PDFAB400R5	***Trifolium hydrophilum*** saline clover	None	None	G2	S2	1B.2
PDLAM220H0	***Trichostema ruygtii*** Napa bluecurls	None	None	G2	S2	1B.2

Element Code	Species	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
PDLIM02043	***Limnanthes floccosa ssp. floccosa*** woolly meadowfoam	None	None	G4T4	S3	4.2
PDLIM02090	***Limnanthes vinculans*** Sebastopol meadowfoam	Endangered	Endangered	G1	S1	1B.1
PDLIN01010	***Hesperolinon adenophyllum*** glandular western flax	None	None	G2G3	S2S3	1B.2
PDLIN01020	***Hesperolinon bicarpellatum*** two-carpellate western flax	None	None	G2	S2	1B.2
PDLIN01070	***Hesperolinon didymocarpum*** Lake County western flax	None	Endangered	G1	S1	1B.2
PDLIN010E0	***Hesperolinon sharsmithiae*** Sharsmith's western flax	None	None	G2Q	S2	1B.2
PDMAL110K2	***Sidalcea oregana ssp. hydrophila*** marsh checkerbloom	None	None	G5T2	S2	1B.2
PDMAL110K5	***Sidalcea oregana ssp. valida*** Kenwood Marsh checkerbloom	Endangered	Endangered	G5T1	S1	1B.1
PDONA030W0	***Camissonia lacustris*** grassland suncup	None	None	G2	S2	1B.2
PDPGN08440	***Eriogonum nervulosum*** Snow Mountain buckwheat	None	None	G2	S2	1B.2
PDPLM030H0	***Eriastrum brandegeeae*** Brandegee's eriastrum	None	None	G1Q	S1	1B.1
PDPLM09140	***Leptosiphon jepsonii*** Jepson's leptosiphon	None	None	G2G3	S2S3	1B.2
PDPLM0C0E1	***Navarretia leucocephala ssp. bakeri*** Baker's navarretia	None	None	G4T2	S2	1B.1
PDPLM0C0E4	***Navarretia leucocephala ssp. pauciflora*** few-flowered navarretia	Endangered	Threatened	G4T1	S1	1B.1
PDPLM0C0E5	***Navarretia leucocephala ssp. plieantha*** many-flowered navarretia	Endangered	Endangered	G4T1	S1	1B.2
PDPLM0C0X2	***Navarretia myersii ssp. deminuta*** small pincushion navarretia	None	None	G2T1	S1	1B.1
PDPLM0C160	***Navarretia paradoxinota*** Porter's navarretia	None	None	G2	S2	1B.3
PDRHA04160	***Ceanothus purpureus*** holly-leaved ceanothus	None	None	G2	S2	1B.2
PDRHA04220	***Ceanothus confusus*** Rincon Ridge ceanothus	None	None	G1	S1	1B.1
PDRHA04240	***Ceanothus divergens*** Calistoga ceanothus	None	None	G2	S2	1B.2
PDRHA04420	***Ceanothus sonomensis*** Sonoma ceanothus	None	None	G2	S2	1B.2

Element Code	Species	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
PDROS0W011	***Horkelia bolanderi*** Bolander's horkelia	None	None	G1	S1	1B.2
PDSCR0D482	***Castilleja rubicundula var. rubicundula*** pink creamsacs	None	None	G5T2	S2	1B.2
PDSCR0R060	***Gratiola heterosepala*** Boggs Lake hedge-hyssop	None	Endangered	G2	S2	1B.2
PDSCR1L483	***Penstemon newberryi var. sonomensis*** Sonoma beardtongue	None	None	G4T3	S3	1B.3
PDSCR2S070	***Antirrhinum subcordatum*** dimorphic snapdragon	None	None	G3	S3	4.3
PMCYP03B20	***Carex praticola*** northern meadow sedge	None	None	G5	S2	2B.2
PMJUN013J0	***Juncus luciensis*** Santa Lucia dwarf rush	None	None	G3	S3	1B.2
PMLIL0C022	***Brodiaea leptandra*** narrow-anthered brodiaea	None	None	G3?	S3?	1B.2
PMLIL0G042	***Chlorogalum pomeridianum var. minus*** dwarf soaproot	None	None	G5T3	S3	1B.2
PMLIL0V0F0	***Fritillaria pluriflora*** adobe-lily	None	None	G2G3	S2S3	1B.2
PMPOA24028	***Panicum acuminatum var. thermale*** Geysers panicum	None	Endangered	G5T2Q	S2	1B.2
PMPOA3D020	***Imperata brevifolia*** California satintail	None	None	G3	S3	2B.1
PMPOA4G050	***Orcuttia tenuis*** slender Orcutt grass	Threatened	Endangered	G2	S2	1B.1
PMPOT03091	***Stuckenia filiformis ssp. alpina*** northern slender pondweed	None	None	G5T5	S2S3	2B.2
PMPOT03160	***Potamogeton zosteriformis*** eel-grass pondweed	None	None	G5	S3	2B.2

Record Count: 117

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
Phone: (916) 414-6600 Fax: (916) 414-6713

In Reply Refer To: 07/16/2025 23:50:08 UTC
Project Code: 2025-0012897
Project Name: Cobb Community Park

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)

(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see https://www.fws.gov/program/migratory-bird-permit/what-we-do.

It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see https://www.fws.gov/library/collections/threats-birds.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/partner/council-conservation-migratory-birds.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

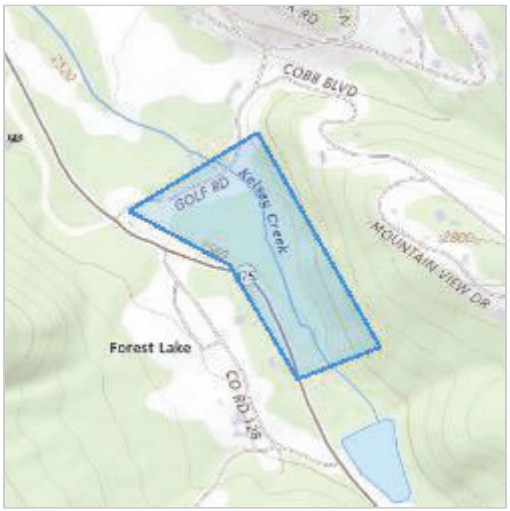
This species list is provided by:

Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
(916) 414-6600

PROJECT SUMMARY

Project Code: 2025-0012897
Project Name: Cobb Community Park
Project Type: Acquisition of Lands
Project Description: New park
Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@38.81968205,-122.71594567315188,14z



Counties: Lake County, California

ENDANGERED SPECIES ACT SPECIES

There is a total of 11 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

BIRDS

NAME	STATUS
Northern Spotted Owl *Strix occidentalis caurina* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1123	Threatened

REPTILES

NAME	STATUS
Green Sea Turtle *Chelonia mydas* Population: East Pacific DPS No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6199	Threatened
Northwestern Pond Turtle *Actinemys marmorata* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1111	Proposed Threatened

FISHES

NAME	STATUS
Clear Lake Hitch *Lavinia exilicauda chi* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9298	Proposed Threatened

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed Threatened

FLOWERING PLANTS

NAME	STATUS
Burke's Goldfields *Lasthenia burkei* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4338	Endangered
Few-flowered Navarretia *Navarretia leucocephala ssp. pauciflora (=N. pauciflora)* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8242	Endangered
Lake County Stonecrop *Parvisedum leiocarpum* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2263	Endangered

NAME	STATUS
Loch Lomond Coyote Thistle *Eryngium constancei* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5106	Endangered
Many-flowered Navarretia *Navarretia leucocephala ssp. plieantha* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2491	Endangered
Slender Orcutt Grass *Orcuttia tenuis* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1063	Threatened

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

Agency: ESA
Name: Liza Ryan
Address: 775 Baywood Dr. Suite 100
City: Petaluma
State: CA
Zip: 94954
Email lizahr@gmail.com
Phone: 7072850583

ScientificNa	CommonNa	Family	Lifeform	CRPR		GRank	SRank	OtherStatus	CESA
Amorpha ca	Napa false	Fabaceae	perennial d	1B.2		G4T2	S2	SB_CalBG/I	None
Amsinckia l	bent-flower	Boraginace	annual herb	1B.2		G3	S3	BLM_S; SB_	None
Antirrhinum	dimorphic s	Plantaginac	annual herb		4.3	G3	S3	USFS_S	None
Antirrhinum	twig-like sn	Plantaginac	perennial h		4.3	G3?	S3?		None
Aphyllon va	Howell's br	Orobancha	perennial h		4.3	G4T3	S3		None
Arctostaphy	Konocti ma	Ericaceae	perennial e	1B.3		G5T3	S3	BLM_S; SB_	None
Arctostaphy	Raiche's ma	Ericaceae	perennial e	1B.1		G3T2	S2	BLM_S; SB_	None
Asclepias s	serpentine	Apocynace	perennial h		4.2	G3	S3	SB_CalBG/I	None
Astragalus l	Brewer's mi	Fabaceae	annual herb		4.2	G3	S3	SB_CalBG/I	None
Astragalus c	Cleveland's	Fabaceae	perennial h		4.3	G4	S4		None
Astragalus ı	Jepson's mi	Fabaceae	annual herb	1B.2		G4T3	S3	BLM_S; SB_	None
Azolla micr	Mexican mo	Azollaceae	annual/per		4.2	G5	S4		None
Brasenia sc	watershield	Cabombac	perennial rh	2B.3		G5	S3	IUCN_LC	None
Brodiaea le	narrow-antl	Themidace	perennial b	1B.2		G3?	S3?	SB_CalBG/I	None
Calamagro	serpentine	Poaceae	perennial h		4.3	G3	S3		None
Calochortu	pink star-tu	Liliaceae	perennial b		4.2	G4	S4	SB_SBBG	None
Calyptridiu	four-petale	Montiaceae	annual herb		4.3	G4	S4	SB_UCBG	None
Calystegia c	Mt. Saint He	Convolvula	perennial rh		4.2	G4T3	S3		None
Calystegia c	three-finger	Convolvula	perennial rh	1B.2		G4T1T2	S1S2	BLM_S	None
Camissonia	grassland s	Onagracea	annual herb	1B.2		G2	S2		None
Carex prati	northern m	Cyperaceae	perennial h	2B.2		G5	S2		None
Castilleja ru	pink cream	Orobancha	annual herb	1B.2		G5T2	S2	BLM_S; SB_	None
Ceanothus	Rincon Ridg	Rhamnacea	perennial e	1B.1		G1	S1	BLM_S; SB_	None
Ceanothus	Calistoga c	Rhamnacea	perennial e	1B.2		G2	S2	BLM_S; SB_	None
Ceanothus	holly-leave	Rhamnacea	perennial e	1B.2		G2	S2	SB_SBBG	None
Ceanothus	Sonoma ce	Rhamnacea	perennial e	1B.2		G2	S2	SB_SBBG	None
Chlorogalu	dwarf soapı	Agavaceae	perennial b	1B.2		G5T3	S3	BLM_S; SB_	None
Clarkia grac	Tracy's clar	Onagracea	annual herb		4.2	G5T3	S3	SB_CalBG/I	None
Collomia di	serpentine	Polemoniac	annual herb		4.3	G4	S4	SB_UCSC	None
Cordylanth	serpentine	Orobancha	annual herb		4.3	G4G5T3	S3		None
Cryptantha	serpentine	Boraginace	annual herb	1B.2		G3	S3	BLM_S	None
Delphinium	swamp lark	Ranunculac	perennial h		4.2	G3	S3	SB_UCBG	None
Downingia v	Cascade do	Campanula	annual herb	2B.2		G4	S2		None
Eriastrum b	Brandegee'	Polemoniac	annual herb	1B.1		G1Q	S1	BLM_S	None
Erigeron bic	streamside	Asteraceae	perennial h		3	G3?	S3?		None
Erigeron gre	Greene's na	Asteraceae	perennial h	1B.2		G2?	S2?	BLM_S	None
Eriogonum	Snow Moun	Polygonace	perennial rh	1B.2		G2	S2	BLM_S; SB_	None
Eriogonum	bay buckwh	Polygonace	perennial h		4.2	G5T3	S3		None
Eryngium c	Loch Lomo	Apiaceae	annual/per	1B.1		G1	S1	SB_CalBG/I	CE
Erythranthe	bare monke	Phrymacea	annual herb		4.3	G4	S4		None
Erythroniun	St. Helena f	Liliaceae	perennial b		4.2	G3	S3		None
Fritillaria pl	adobe-lily	Liliaceae	perennial b	1B.2		G2G3	S2S3	BLM_S; SB_	None
Fritillaria pu	Purdy's friti	Liliaceae	perennial b		4.3	G4	S4	SB_UCSC	None

Gratiola het	Boggs Lake	Plantaginac	annual herb	1B.2		G2	S2	BLM_S	CE
Grimmia to	Toren's grin	Grimmiace	moss	1B.3		G2	S2	BLM_S	None
Harmonia h	Hall's harm	Asteraceae	annual herb	1B.2		G2?	S2?	BLM_S; SB_	None
Harmonia n	nodding ha	Asteraceae	annual herb		4.3	G3	S3	SB_UCBG	None
Hemizonia	Mendocino	Asteraceae	annual herb		4.3	G5T4	S4		None
Hemizonia	congested-	Asteraceae	annual herb	1B.2		G5T2	S2	SB_UCBG	None
Hesperolin	glandular w	Linaceae	annual herb	1B.2		G2G3	S2S3	BLM_S	None
Hesperolin	two-carpell	Linaceae	annual herb	1B.2		G2	S2	BLM_S; SB_	None
Hesperolin	Lake Count	Linaceae	annual herb	1B.2		G1	S1	BLM_S; SB_	CE
Hesperolin	Sharsmith's	Linaceae	annual herb	1B.2		G2Q	S2	BLM_S; SB_	None
Horkelia bo	Bolander's	Rosaceae	perennial h	1B.2		G1	S1	BLM_S	None
Imperata br	California s	Poaceae	perennial rh	2B.1		G3	S3	SB_CalBG/I	None
Juncus luci	Santa Lucia	Juncaceae	annual herb	1B.2		G3	S3	BLM_S; USF	None
Lasthenia b	Burke's gol	Asteraceae	annual herb	1B.1		G1	S1	SB_CalBG/I	CE
Layia septe	Colusa layi	Asteraceae	annual herb	1B.2		G2	S2	BLM_S; SB_	None
Legenere li	legenere	Campanula	annual herb	1B.1		G2	S2	BLM_S; SB_	None
Leptosipho	bristly lepto	Polemoniac	annual herb		4.2	G4?	S4?		None
Leptosipho	large-flowe	Polemoniac	annual herb		4.2	G3G4	S3S4		None
Leptosipho	Jepson's lep	Polemoniac	annual herb	1B.2		G2G3	S2S3	SB_CalBG/I	None
Leptosipho	broad-lobe	Polemoniac	annual herb		4.3	G4	S4		None
Lilium rube	redwood lily	Liliaceae	perennial b		4.2	G3	S3	SB_CalBG/I	None
Limnanthes	woolly mea	Limnanthac	annual herb		4.2	G4T4	S3	SB_UCBG	None
Limnanthes	Sebastopol	Limnanthac	annual herb	1B.1		G1	S1	SB_CalBG/I	CE
Lomatium h	Hoover's lo	Apiaceae	perennial h		4.3	G3	S3		None
Lomatium r	Napa lomat	Apiaceae	perennial h		4.2	G3	S3	SB_UCSC	None
Lupinus ser	Cobb Moun	Fabaceae	perennial h	1B.2		G2?	S2?	BLM_S; SB_	None
Malacothar	Heller's bus	Malvaceae	perennial d		3.3	G2Q	S2		None
Micropus ar	Mt. Diablo c	Asteraceae	annual herb		3.2	G3G4	S3S4	SB_UCSC	None
Mielichhofe	elongate co	Mielichhofe	moss		4.3	G5	S3S4	USFS_S	None
Monardella	green mona	Lamiaceae	perennial rh		4.3	G3	S3		None
Myosurus m	little mouse	Ranunculac	annual herb		3.1	G5T2Q	S2	SB_CRES	None
Navarretia c	cotula nava	Polemoniac	annual herb		4.2	G4	S4		None
Navarretia j	Jepson's na	Polemoniac	annual herb		4.3	G4	S4		None
Navarretia l	Baker's nav	Polemoniac	annual herb	1B.1		G4T2	S2	BLM_S; SB_	None
Navarretia l	few-flowere	Polemoniac	annual herb	1B.1		G4T1	S1	SB_CalBG/I	CT
Navarretia l	many-flowe	Polemoniac	annual herb	1B.2		G4T1	S1	SB_CalBG/I	CE
Navarretia r	small pincu	Polemoniac	annual herb	1B.1		G2T1	S1		None
Navarretia p	Porter's nav	Polemoniac	annual herb	1B.3		G2	S2	BLM_S	None
Orcuttia ter	slender Orc	Poaceae	annual herb	1B.1		G2	S2	SB_UCBG	CE
Panicum ac	Geysers pa	Poaceae	annual/per	1B.2		G5T2Q	S2	BLM_S; SB_	CE
Penstemon	Sonoma be	Plantaginac	perennial h	1B.3		G4T3	S3	BLM_S	None
Piperia mic	Michael's re	Orchidacea	perennial h		4.2	G3	S3	SB_SBBG	None
Potamoget	eel-grass p	Potamoget	annual herb	2B.2		G5	S3		None
Ribes victor	Victor's goo	Grossularia	perennial d		4.3	G3G4	S3S4		None

Sedella leio	Lake Count	Crassulace	annual herb	1B.1		G1	S1		CE
Sidalcea or	marsh chec	Malvaceae	perennial h	1B.2		G5T2	S2	SB_UCSC	None
Sidalcea or	Kenwood M	Malvaceae	perennial rh	1B.1		G5T1	S1	SB_CalBG/I	CE
Streptanthu	bearded jev	Brassicace	annual herb		4.2	G3	S3	SB_UCBG	None
Streptanthu	Socrates Mi	Brassicace	perennial h	1B.2		G2T1	S1	BLM_S	None
Streptanthu	Freed's jew	Brassicace	perennial h	1B.2		G2T2	S2	BLM_S	None
Streptanthu	Hoffman's b	Brassicace	annual herb	1B.3		G4T2	S2	BLM_S; SB_	None
Streptanthu	green jewel	Brassicace	annual herb	1B.2		G2G3	S2S3	BLM_S; SB_	None
Streptanthu	Three Peaks	Brassicace	perennial h	1B.2		G2T1	S1	BLM_S	None
Streptanthu	early jewelf	Brassicace	annual herb	1B.2		G1	S1	BLM_S; SB_	None
Stuckenia fi	northern sl	Potamoget	perennial rh	2B.2		G5T5	S2S3		None
Toxicoscor	marsh zigad	Melanthiac	perennial b		4.2	G3	S3	SB_UCSC	None
Trichostem	Napa bluec	Lamiaceae	annual herb	1B.2		G2	S2	SB_CalBG/I	None
Trifolium hy	saline clove	Fabaceae	annual herb	1B.2		G2	S2		None
Viburnum e	oval-leaved	Viburnacea	perennial d	2B.3		G4G5	S3		None

FESA	BloomingPe	Habitat	Microhabita	Microhabita	ElevationLo	ElevationLo	ElevationHi	ElevationHi
None	Apr-Jul	Broadleafed upland forest (opening			50	165	2000	6560
None	Mar-Jun	Cismontane woodland,	Coastal blu		3	10	500	1640
None	Apr-Jul	Chaparral, Lower mont	Serpentine		185	605	800	2625
None	Jun-Jul	Chaparral, Lower mont	Openings,		100	330	2015	6610
None	Jun-Sep	Chaparral (serpentinite, volcanic)			180	590	1740	5710
None	(Jan)Mar-M	Chaparral, Cismontane	Volcanic		395	1295	1615	5300
None	Feb-Apr	Chaparral, Lower mont	Rocky, Serp		450	1475	1035	3395
None	May-Jul(Aug	Chaparral, Cismontane	Serpentine		230	755	1860	6105
None	Apr-Jun	Chaparral, Cismontane	Serpentine		90	295	730	2395
None	Jun-Sep	Chaparral, Cismontane	Seeps, Serp		200	655	1500	4920
None	Mar-Jun	Chaparral, Cismontane	Serpentine		295	970	700	2295
None	Aug	Marshes and swamps (ponds, slow			30	100	100	330
None	Jun-Sep	Marshes and swamps (freshwater)			0	0	2200	7220
None	May-Jul	Broadleafed upland for	Volcanic		110	360	915	3000
None	Apr-Jul	Chaparral (openings, o	Rocky, Serp		90	295	1065	3495
None	Apr-Jun	Coastal prairie, Coastal scrub, Mea			10	35	1070	3510
None	Apr-Jun	Chaparral, Lower mont	Gravelly (sc		315	1035	2040	6695
None	Apr-Jun	Chaparral, Lower mont	Serpentine		279	915	1010	3315
None	Apr-Jun	Chaparral, Cismontane	Gravelly, O		0	0	600	1970
None	Mar-Jun	Chaparral, Cismontane	Granitic, G		180	590	1220	4005
None	May-Jul	Meadows and seeps (mesic)			0	0	3200	10500
None	Apr-Jun	Chaparral (openings), (	Serpentine		20	65	910	2985
None	Feb-Jun	Chaparral, Cismontane	Serpentine		75	245	1065	3495
None	Feb-Apr	Chaparral (rocky, serpentinite, volc			170	560	950	3115
None	Feb-Jun	Chaparral, Cismontane	Rocky, Volc		120	395	640	2100
None	Feb-Apr	Chaparral (sandy, serpentinite, vol			215	705	800	2625
None	May-Aug	Chaparral (serpentinite)			305	1000	1000	3280
None	Apr-Jul	Chaparral (openings, serpentinite)			65	215	650	2135
None	May-Jun	Chaparral, Cismontane	Gravelly (sc		200	655	600	1970
None	Jul-Aug	Chaparral, Cismontane	Serpentine		305	1000	915	3000
None	Apr-Jun	Chaparral (serpentinite)			395	1295	580	1905
None	May-Jun	Chaparral, Valley and f	Seeps, Serp		340	1115	610	2000
None	Jun-Jul(Sep	Cismontane woodland (lake margi			15	50	1110	3640
None	Apr-Aug	Chaparral, Cismontane	Sandy, Volc		425	1395	840	2755
None	Jun-Oct	Broadleafed upland for	Mesic, Roc		30	100	1100	3610
None	May-Sep	Chaparral (serpentinite, volcanic)			80	260	1005	3295
None	Jun-Sep	Chaparral (serpentinite)			300	985	2105	6905
None	Jul-Sep	Cismontane woodland	Rocky, Serp		700	2295	2200	7220
FE	Apr-Jun	Vernal pools			460	1510	855	2805
None	May-Jun	Chaparral, Cismontane	Seeps, Serp		200	655	700	2295
None	Mar-May	Chaparral, Cismontane	Serpentine		350	1150	1220	4005
None	Feb-Apr	Chaparral, Cismontane	Adobe (ofte		60	195	705	2315
None	Mar-Jun	Chaparral, Cismontane	Serpentine		175	575	2255	7400

None	Apr-Aug	Marshes and swamps (	Clay	10	35	2375	7790
None		Chaparral, boulder and	Carbonate,	325	1065	1160	3805
None	(Mar)Apr-Ju	Chaparral (serpentinite)		305	1000	975	3200
None	Mar-May	Chaparral, Cismontane	Gravelly (s	75	245	975	3200
None	Jul-Nov	Cismontane woodland	Serpentine	225	740	1400	4595
None	Apr-Nov	Valley and foothill gras	Roadsides	20	65	560	1835
None	May-Aug	Chaparral, Cismontane	Serpentine	150	490	1315	4315
None	(Apr)May-Ju	Chaparral (serpentinite)		60	195	1005	3295
None	May-Jul	Chaparral, Cismontane	Serpentine	330	1085	365	1200
None	May-Jul	Chaparral	Serpentine	270	885	300	985
None	(May)Jun-A	Chaparral, Lower mont	Edges, Ver	450	1475	1100	3610
None	Sep-May	Chaparral, Coastal scr	Mesic	0	0	1215	3985
None	Apr-Jul	Chaparral, Great Basin	scrub, Lowe	300	985	2040	6695
FE	Apr-Jun	Meadows and seeps (mesic), Verna		15	50	600	1970
None	Apr-May	Chaparral, Cismontane	Sandy, Ser	100	330	1095	3595
None	Apr-Jun	Vernal pools		1	5	880	2885
None	Apr-Jul	Chaparral, Cismontane	woodland,	55	180	1500	4920
None	Apr-Aug	Cismontane woodland	Sandy (usu	5	15	1220	4005
None	Mar-May	Chaparral, Cismontane	Volcanic (u	100	330	500	1640
None	Apr-Jun	Broadleafed upland forest, Cismon		170	560	1500	4920
None	(Mar)Apr-A	Broadleafed upland for	Roadsides	30	100	1910	6265
None	Mar-May(Ju	Chaparral, Cismontane	Vernally Me	60	195	1335	4380
FE	Apr-May	Meadows and seeps, V	Vernally Me	15	50	305	1000
None	Apr-Jul	Chaparral, Cismontane	Serpentine	300	985	885	2905
None	Mar-Jun	Broadleafe Flat to steep	Gravelly (s	90	295	1440	4725
None	Mar-Jun	Broadleafed upland forest, Chapar		275	900	1525	5005
None	May-Jul	Chaparral (sandstone), Riparian w		305	1000	635	2085
None	Mar-May	Broadleafed upland for	Rocky	45	150	825	2705
None		Broadleafed upland for	Acidic (usu	0	0	1960	6430
None	Jun-Sep	Broadleafed upland forest, Chapar		100	330	1010	3315
None	Mar-Jun	Valley and foothill grassland, Verna		20	65	640	2100
None	May-Jun	Chaparral, Cismontane	Adobe	4	15	1830	6005
None	Apr-Jun	Chaparral, Cismontane	Serpentine	175	575	855	2805
None	Apr-Jul	Cismontane woodland	Mesic	5	15	1740	5710
FE	May-Jun	Vernal pools (volcanic ash)		400	1310	855	2805
FE	May-Jun	Vernal pools (volcanic ash)		30	100	950	3115
None	Apr-May	Vernal pools (clay, loam)		355	1165	355	1165
None	May-Jun(Jul	Meadows a Often drain	Openings,	165	540	840	2755
FT	May-Sep(O	Vernal pools	Gravelly (o	35	115	1760	5775
None	Jun-Aug	Closed-cor geothermal	Streamban	305	1000	2470	8105
None	Apr-Aug	Chaparral (rocky)		700	2295	1370	4495
None	Apr-Aug	Chaparral, Cismontane	woodland,	3	10	915	3000
None	Jun-Jul	Marshes and swamps (freshwater)		0	0	1860	6105
None	Mar-Apr	Broadleafe shady	Mesic	100	330	750	2460

FE	Apr-May	Cismontan vernally me	Vernally Me	365	1200	790	2590
None	(Jun)Jul-Aug	Meadows and seeps, R	Mesic	1100	3610	2300	7545
FE	Jun-Sep	Marshes and swamps (freshwater)		115	375	150	490
None	May-Jul	Chaparral (serpentinite)		150	490	1070	3510
None	May-Jun	Chaparral, Closed-con	Serpentine	545	1790	1000	3280
None	May-Jul	Chaparral, Cismontane	Serpentine	490	1610	1220	4005
None	Mar-Jul	Chaparral, Cismontane	Rocky	120	395	475	1560
None	May-Jul	Chaparral (openings), (	Rocky, Serp	130	425	760	2495
None	Jun-Sep	Chaparral (serpentinite)		90	295	815	2675
None	Mar-May	Chaparral, Closed-con	Serpentine	610	2000	610	2000
None	May-Jul	Marshes and swamps (shallow fres		300	985	2150	7055
None	Apr-Jul	Chaparral, Cismontane	Serpentine	15	50	1000	3280
None	Jun-Oct	Chaparral, Cismontane woodland,		30	100	680	2230
None	Apr-Jun	Marshes and swamps, Valley and fe		0	0	300	985
None	May-Jun	Chaparral, Cismontane woodland,		215	705	1400	4595

CAEndemic	States	Counties	Quads	EOTotal	EOA	EOB	EOC	EOD
TRUE	CA	LAK, MRN,	Aetna Sprir	126	13	36	22	4
TRUE	CA	ALA, CCA, (	Aetna Sprir	93	3	16	5	1
TRUE	CA	COL, GLE,	Chrome (3	49	11	3	4	0
TRUE	CA	LAK, NAP, S	Aetna Sprir	0	0	0	0	0
TRUE	CA	GLE, LAK, M	Chiles Vall	0	0	0	0	0
TRUE	CA	COL, GLE,	Alder Sprin	69	1	7	2	1
TRUE	CA	LAK, MEN	Clearlake H	13	1	0	0	0
TRUE	CA	COL, GLE,	Benmore C	0	0	0	0	0
TRUE	CA	COL, LAK, M	Aetna Sprir	0	0	0	0	0
TRUE	CA	COL, LAK, M	Aetna Sprir	0	0	0	0	0
TRUE	CA	COL, GLE,	Chrome (3	54	9	14	4	1
FALSE	AR, AZ, BA,	BUT, COL, (	Alturas (41	0	0	0	0	0
FALSE	AK, AL, AR,	BUT, CAL, E	Annapolis (	43	6	1	0	0
TRUE	CA	LAK, NAP, S	Calistoga (	39	4	8	1	0
TRUE	CA	LAK, MEN,	Bolinas (37	0	0	0	0	0
FALSE	CA, OR	COL, HUM,	Aetna Sprir	0	0	0	0	0
TRUE	CA	COL, LAK, M	Clearlake H	0	0	0	0	0
TRUE	CA	COL, LAK, M	Aetna Sprir	9	2	2	0	0
TRUE	CA	COL, LAK, M	Brushy Mtn	11	2	0	1	0
FALSE	CA	ELD, FRE, L	Camino (38	14	0	0	0	0
FALSE	AK, CA, CO	DNT, HUM,	Arcata Sou	14	0	2	0	0
TRUE	CA	BUT, COL, (	Chittenden	42	5	7	1	3
TRUE	CA	LAK, MEN,	Bartlett Mtı	33	1	2	5	0
TRUE	CA	LAK, NAP, S	Calistoga (	26	2	5	3	2
TRUE	CA	NAP, SOL, S	Camp Mee	43	4	6	1	0
TRUE	CA	LAK, NAP, S	Aetna Sprir	30	3	1	0	1
TRUE	CA	ALA, COL, (	Camatta Ra	31	13	3	0	1
TRUE	CA	COL, LAK, M	Aetna Sprir	0	0	0	0	0
TRUE	CA	CCA, COL,	Aetna Sprir	0	0	0	0	0
TRUE	CA	COL, GLE,	Aetna Sprir	0	0	0	0	0
TRUE	CA	COL, LAK, M	Brushy Mtn	23	0	3	0	0
TRUE	CA	BUT, COL,	Aetna Sprir	0	0	0	0	0
FALSE	CA, OR, WA	DNT, HUM,	Fortuna (40	8	0	0	0	0
TRUE	CA	LAK	Clearlake H	6	1	1	2	0
TRUE	CA	HUM, MEN	Annapolis (	0	0	0	0	0
TRUE	CA	COL, LAK, M	Bartlett Spı	20	1	3	0	0
TRUE	CA	COL, GLE,	Crockett Pe	9	4	2	0	0
TRUE	CA	ALA, CCA, (	Cedar Mtn.	0	0	0	0	0
TRUE	CA	LAK, SON	Calistoga (	4	0	2	0	1
TRUE	CA	COL, GLE,	Aetna Sprir	0	0	0	0	0
TRUE	CA	LAK, NAP, S	Aetna Sprir	0	0	0	0	0
TRUE	CA	BUT, COL, (	Aetna Sprir	114	12	31	14	4
FALSE	CA, OR	COL, GLE,	Aetna Sprir	0	0	0	0	0

FALSE	CA, OR	FRE, LAK, L	Ambrose (4	110	21	37	13	3
TRUE	CA	CCA, LAK, I	Big Basin (3	13	0	0	0	0
TRUE	CA	COL, LAK, I	Aetna Sprir	23	2	5	1	0
TRUE	CA	LAK, NAP, S	Aetna Sprir	0	0	0	0	0
TRUE	CA	LAK, MEN,	Bartlett Mtı	0	0	0	0	0
TRUE	CA	LAK, MEN,	Arched Roc	52	1	5	3	1
TRUE	CA	LAK, MEN	Bartlett Mtı	48	2	10	1	0
TRUE	CA	LAK, NAP, S	Aetna Sprir	25	5	2	0	0
TRUE	CA	LAK	Middletowı	6	0	2	2	0
TRUE	CA	LAK, NAP	Aetna Sprir	32	3	8	4	0
TRUE	CA	COL, LAK, I	Benmore C	13	3	6	0	0
FALSE	AZ, BA, CA,	BUT, FRE, I	Azusa (341	32	0	0	0	1
TRUE	CA	LAS, MNT, I	Adelaida (3	37	0	1	0	0
TRUE	CA	LAK, MEN,	Calistoga (	36	3	14	8	3
TRUE	CA	BUT, COL, (	Aetna Sprir	69	7	7	0	0
TRUE	CA	ALA, LAK, M	Balls Ferry	83	11	30	10	3
TRUE	CA	ALA, BUT, C	Auburn (38	0	0	0	0	0
TRUE	CA	ALA, CCA, I	Arroyo Grai	0	0	0	0	0
TRUE	CA	LAK, NAP, S	Aetna Sprir	51	2	4	1	1
TRUE	CA	COL, DNT,	Aetna Sprir	0	0	0	0	0
TRUE	CA	DNT, GLE, I	Bailey Ridg	0	0	0	0	0
FALSE	CA, OR	BUT, LAK, L	Acorn Hollo	54	9	18	9	2
TRUE	CA	NAP, SON	Calistoga (	47	2	12	6	3
TRUE	CA	COL, LAK, I	Detert Reso	0	0	0	0	0
TRUE	CA	LAK, NAP, S	Aetna Sprir	0	0	0	0	0
TRUE	CA	COL, LAK, I	Aetna Sprir	46	0	1	8	2
TRUE	CA	COL, GLE,	Benmore C	0	0	0	0	0
TRUE	CA	LAK, MNT, I	Ano Nuevo	0	0	0	0	0
FALSE	AK, CA, CO	BUT, FRE, H	Ano Nuevo	20	0	0	0	0
TRUE	CA	LAK, LAX, M	Aetna Sprir	0	0	0	0	0
FALSE	BA, CA, OR	CCA, COL,	Arena (371	24	1	7	1	1
TRUE	CA	CCA, LAK, I	Aetna Sprir	0	0	0	0	0
TRUE	CA	COL, LAK, I	Aetna Sprir	0	0	0	0	0
TRUE	CA	COL, GLE,	Allendale (	64	5	8	3	0
TRUE	CA	LAK, NAP	Capell Vall	10	1	4	1	0
TRUE	CA	LAK, SON	Clearlake H	8	2	3	2	0
TRUE	CA	LAK	Detert Reso	1	0	1	0	0
TRUE	CA	COL, LAK, I	Aetna Sprir	9	0	0	0	1
TRUE	CA	BUT, LAK, L	Almanor (4	100	14	50	19	3
TRUE	CA	LAK, PLU, S	Lassen Pea	11	1	3	0	0
TRUE	CA	LAK, NAP, S	Aetna Sprir	15	3	2	0	0
TRUE	CA	ALA, CCA, I	Antioch So	0	0	0	0	0
FALSE	AK, CA, CT,	CCA, LAK, I	Alturas (41	20	0	6	1	0
TRUE	CA	NAP	Detert Reso	0	0	0	0	0

TRUE	CA	LAK	Clearlake H	5	0	3	0	0
TRUE	CA	COL, GLE,	Clearlake H	35	4	0	1	0
TRUE	CA	SON	Kenwood (3	2	0	0	2	0
TRUE	CA	COL, LAK, S	Cazadero (	0	0	0	0	0
TRUE	CA	LAK, NAP, S	Detert Rese	10	1	3	0	0
TRUE	CA	LAK, SON	Jericho Val	13	5	6	0	0
TRUE	CA	LAK, MEN,	Arched Roc	16	2	2	2	0
TRUE	CA	LAK, NAP, \	Aetna Sprir	36	3	1	0	0
TRUE	CA	LAK, NAP	Aetna Sprir	7	0	2	0	0
TRUE	CA	LAK	Detert Rese	1	0	0	0	0
FALSE	AK, AZ, CA,	ALA, BUT, C	Marlette La	21	0	0	0	0
TRUE	CA	COL, LAK, M	Aetna Sprir	0	0	0	0	0
TRUE	CA	LAK, NAP, S	Capell Vall	19	0	0	1	0
TRUE	CA	ALA, CCA, I	Altamont (3	56	1	10	4	1
FALSE	CA, OR, WA	ALA, CCA, I	Antioch So	39	1	6	1	0

EOX	EOU	EOHistoric	EORecent	EOExtant	EOPossibly	EOExtirpate	EOThreatLi	ThreatListT
1	50	32	94	125	1	0	69	17
0	68	39	54	93	0	0	22	9
1	30	49	0	48	1	0	19	6
0	0	0	0	0	0	0		0
0	0	0	0	0	0	0		0
0	58	56	13	69	0	0	10	6
0	12	11	2	13	0	0	2	3
0	0	0	0	0	0	0		0
0	0	0	0	0	0	0		0
0	0	0	0	0	0	0		0
0	26	22	32	54	0	0	14	8
0	0	0	0	0	0	0		0
4	32	28	15	39	2	2	3	4
1	25	28	11	38	1	0	11	9
0	0	0	0	0	0	0		0
0	0	0	0	0	0	0		0
0	0	0	0	0	0	0		0
0	5	9	0	9	0	0	3	4
0	8	4	7	11	0	0	2	2
1	13	9	5	13	0	1	3	4
0	12	12	2	14	0	0	1	2
4	22	17	25	38	4	0	10	12
1	24	24	9	32	0	1	12	9
0	14	17	9	26	0	0	11	8
1	31	34	9	42	1	0	8	4
0	25	25	5	30	0	0	3	4
0	14	22	9	31	0	0	5	6
0	0	0	0	0	0	0		0
0	0	0	0	0	0	0		0
0	0	0	0	0	0	0		0
0	20	12	11	23	0	0	6	5
0	0	0	0	0	0	0		0
0	8	8	0	8	0	0	0	0
0	2	3	3	6	0	0	4	5
0	0	0	0	0	0	0		0
0	16	17	3	20	0	0	1	1
0	3	6	3	9	0	0	3	4
0	0	0	0	0	0	0		0
0	1	3	1	4	0	0	3	7
0	0	0	0	0	0	0		0
0	0	0	0	0	0	0		0
0	53	78	36	114	0	0	69	11
0	0	0	0	0	0	0		0

5	31	73	37	105	1	4	75	16
0	13	5	8	13	0	0	0	0
0	15	13	10	23	0	0	9	4
0	0	0	0	0	0	0		0
0	0	0	0	0	0	0		0
4	38	40	12	48	3	1	19	8
0	35	39	9	48	0	0	14	9
0	18	16	9	25	0	0	6	5
0	2	5	1	6	0	0	4	5
0	17	29	3	32	0	0	10	8
1	3	6	7	12	1	0	10	11
0	31	27	5	32	0	0	3	1
0	36	32	5	37	0	0	2	2
4	4	13	23	32	1	3	30	17
1	54	46	23	68	1	0	10	7
9	20	60	23	74	1	8	59	15
0	0	0	0	0	0	0		0
0	0	0	0	0	0	0		0
0	43	28	23	51	0	0	8	8
0	0	0	0	0	0	0		0
0	0	0	0	0	0	0		0
0	16	54	0	54	0	0	34	10
8	16	21	26	39	5	3	42	14
0	0	0	0	0	0	0		0
0	0	0	0	0	0	0		0
1	34	40	6	45	1	0	8	7
0	0	0	0	0	0	0		0
0	0	0	0	0	0	0		0
0	20	16	4	20	0	0	0	0
0	0	0	0	0	0	0		0
0	14	24	0	24	0	0	9	9
0	0	0	0	0	0	0		0
0	0	0	0	0	0	0		0
10	38	43	21	54	6	4	27	12
0	4	5	5	10	0	0	7	11
0	1	3	5	8	0	0	7	9
0	0	1	0	1	0	0	1	1
0	8	1	8	9	0	0	1	1
7	7	32	68	93	4	3	84	14
1	6	7	4	10	1	0	4	7
0	10	6	9	15	0	0	3	3
0	0	0	0	0	0	0		0
0	13	13	7	20	0	0	7	4
0	0	0	0	0	0	0		0

1	1	3	2	4	1	0	5	6
1	29	29	6	34	1	0	6	6
0	0	1	1	2	0	0	2	6
0	0	0	0	0	0	0		0
0	6	8	2	10	0	0	4	4
0	2	11	2	13	0	0	11	5
0	10	7	9	16	0	0	3	3
0	32	15	21	36	0	0	0	0
0	5	6	1	7	0	0	1	2
0	1	1	0	1	0	0	1	1
0	21	21	0	21	0	0	0	0
0	0	0	0	0	0	0		0
2	16	17	2	17	1	1	3	2
10	30	32	24	46	3	7	26	13
0	31	26	13	39	0	0	5	4

ThreatList	Notes	Threats	Taxonomy	FullScientif	Synonyms	ElementCo	USDAPlant	CBRReasor
Agriculture	Threatened by development and ha			Amorpha californica va		PDFAB0801	AMCAN	
Developme	Many collec	Threatened by developr		Amsinckia lunaris		PDBOR010	AMLU	
Dam/Inundation, Grazing, Logging, Other, Recr				Antirrhinum subcordatu		PDSCR2S070		
				Antirrhinum virga		PDSCR2S090		
	Generally parasitic on Garrya spp.			Aphyllon va	Orobanche	PDORO040	ORVAH	
Agriculture, Developme		Possibly threatened by		Arctostaphylos manzan		PDERI0427	ARMAE	
Mining, OR	Threatened by urbanization and veh			Arctostaphylos stanfor		PDERI041G	ARSTR	
	Not commo	Threatened by grazing, v		Asclepias solanoana		PDASC021	ASSO	
	Populations have been lost to devel			Astragalus breweri		PDFAB0F1J	ASBR8	
				Astragalus clevelandii		PDFAB0F25	ASCL2	
Developme	Most occur	Possibly threatened by		Astragalus rattanii var. j		PDFAB0F7E	ASRAJ	
	Too common? Difficult to distingui			Azolla micr	Azolla mex	PPAZO010	AZMI	
Altered floc	Many occurrences historical; need			Brasenia schreberi		PDCAB010	BRSC	
Agriculture	Threatened by development, foot tr			Brodiaea le	Brodiaea c	PMLIL0C022		
				Calamagrostis ophitidis		PMPOA170	CAOP2	
	Threatened by agriculture, developr			Calochortus uniflorus		PMLIL0D1F	CAUN	
	Threatened by vehicles. See Proce			Calyptridium quadripet		PDPOR09080		
Erosion/rur	Threatened by road maintenance. F			Calystegia collina ssp.		PDCON040	CACOO	
Developme	Potentially threatened by geotherm			Calystegia collina ssp. t		PDCON040	CACOT	
Dam/Inundation, Deve	Threatened Sierran plar			Camissonia lacustris		PDONA030	CALA39	
Grazing, Lo	On review list in OR.			Carex praticola		PMCYP03B	CAPR7	
Agriculture	Possibly threatened by grazing, min			Castilleja ru	Castilleja r	PDSCR0D482		
Agriculture	Closely rela	Threatened by developr		Ceanothus confusus		PDRHA042	CECO6	
Agriculture	Threatened by habitat alteration an			Ceanothus divergens		PDRHA042	CEDI	
Agriculture	Threatened by agriculture, developr			Ceanothus purpureus		PDRHA041	CEPU2	
Developme	Seriously threatened by habitat alte			Ceanothus sonomensis		PDRHA044	CESO	
Erosion/runoff, Feral pigs, Grazing, Improper bu				Chlorogalum pomeridia		PMLIL0G04	CHPOM	
	Threatened by development. See F			Clarkia gracilis ssp. trac		PDONA050	CLGRT	
	Possibly threatened by wind energy			Collomia diversifolia		PDPLM020	CODI2	
	Threatened by development and roa			Cordylanthus tenuis ss		PDSCR0J0	COTEB	
Agriculture	Potentially threatened by developm			Cryptantha	Cryptantha	PDBOR0A0H2		
	Highly localized. Hybridizes with D.			Delphinium uliginosum		PDRAN0B1	DEUL	
		May be mor		Downingia willametten		PDCAM060	DOWI	
Developme	Most reliabl	Seriously threatened at		Eriastrum brandegeeae		PDPLM030	ERBR3	
	Move to List 1B? Location, rarity, an			Erigeron biolettii		PDAST3M5	ERBI7	
Other	See Bulletin of the Southern Califor			Erigeron gre	Erigeron ar	PDAST3M5G0		
Developme	Known from fewer than twenty occu			Eriogonum nervulosum		PDPGN084	ERNE8	
	See Phytologia 66(4): 341-346 (198			Eriogonum umbellatum		PDPGN086	ERUMB	
Agriculture	Known only from three occurrences			Eryngium constancei		PDAPI0Z0W	ERCO39	
	See Bulletin of the California Acade			Erythranthe	Mimulus n	PDSCR1B200		
	Threatened by horticultural collecti			Erythronium helenae		PMLIL0U06	ERHE6	
Biocides, D	Threatened by grazing, vehicles, de			Fritillaria pluriflora		PMLIL0V0F	FRPL	
	Endangered	Threatened by logging.		Fritillaria purdyi		PMLIL0V0H	FRPU3	

Agriculture	Threatened by agriculture, develop	Gratiola heterosepala		PDSCR0R0	GRHE
	Similar to&	Grimmia torenii		NBMUS32330	
Development, Grazing,	Threatened A synonym	Harmonia h	Madia halli	PDAST650A	HAHA11
	Possibly threatened by developmer	Harmonia n	Madia nuta	PDAST650E	HANU3
		Hemizonia	Hemizonia	PDAST4R06	HECOC5
Agriculture	Threatened by agriculture, develop	Hemizonia	Hemizonia	PDAST4R0V	HECOC2
Biocides, Developmen	Threatened by geothern	Hesperolinon adenophy		PDLIN0101	HEAD
Developme	Previously confused with H. serpen	Hesperolinon bicarpell		PDLIN0102	HEBI3
Dam/Inunc	Known from fewer than ten occurre	Hesperolinon didymoca		PDLIN0107	HEDI3
Agriculture	Threatened by development. Incluc	Hesperolinon sharsmitl		PDLIN010E0	
Agriculture, Altered floc	Threatened by vehicles.	Horkelia bolanderi		PDROS0WC	HOBO2
Developme	Many collec Threatened by developr	Imperata brevifolia		PMPOA3D0	IMBR2
Agriculture	Potentially threatened by developm	Juncus luciensis		PMJUN013J	JULU2
Agriculture	Threatened by agriculture, urbaniza	Lasthenia burkei		PDAST5L01	LABU
Agriculture	Historical o Threatened by developr	Layia septentrionalis		PDAST5N0I	LASE2
Agriculture	Many historical occurrences extirpa	Legenere limosa		PDCAM0C0	LELI
	Historical o Potentially t A synonym	Leptosipho	Leptosipho	PDPLM090	LEAC11
	Many historical occurrences extirpa	Leptosipho	Linanthus g	PDPLM090I	LEGR23
Agriculture	Threatened by habitat conversion a	Leptosipho	Linanthus j	PDPLM091	LEJE
	Not in The Jepson Manual. See Mac	Leptosipho	Linanthus l	PDPLM091I	LELA43
	Increasingly Threatened by urbaniza	Lilium rubescens		PMLIL1A0N	LIRU
Altered flood/tidal/hyd	Threatened by grazing a	Limnanthes floccosa ss		PDLIM0204	LIFLF
Agriculture	Only NAP Co. occurrence (500A) m	Limnanthes vinculans		PDLIM0209	LIVI3
	Potentially t A synonym	Lomatium h	Loamatium	PDAPI1B2K	LOHO3
	Regeneratic Threatened by alteratio	Lomatium repostum		PDAPI1B1M	LORE2
Agriculture, Biocides, D	Threatened by geothern	Lupinus sericatus		PDFAB2B3J	LUSE3
	Previously CRPR 4.3; m A synonym	Malacothamnus helleri		PDMAL0Q0G0	
	Move to List 4? Can be confused wi	Micropus a	Stylocline a	PDAST6D03	MIAM3
	Previously CRPR 2B.2; more comm	Mielichhoferia elongata		NBMUS4Q022	
	Potentially threatened by developm	Monardella	Monardella	PDLAM180	MOVI3
Agriculture	Move to List 1B? Reduced by vernal	Myosurus minimus ssp.		PDRAN0H031	
	Does plant occur in SIS Co.? Threa	Navarretia cotulifolia		PDPLM0C0	NACO
	Possibly threatened by non-native p	Navarretia jepsonii		PDPLM0C0	NAJE
Agriculture	May be mor Threatened by developr	Navarretia leucocephal		PDPLM0C0	NALEB
Agriculture	Threatened by altered hydrology, er	Navarretia l	Navarretia	PDPLM0C0	NALEP
Agriculture	Known from fewer than ten occurre	Navarretia l	Navarretia	PDPLM0C0	NALEP2
Developme	Known only Potentially threatened b	Navarretia myersii ssp.		PDPLM0C0	NAMYD
Developme	Similar to, and sympatric with, N. in	Navarretia paradoxinot		PDPLM0C1	NAPA5
Altered floc	Seriously threatened by agriculture,	Orcuttia tenuis		PMPOA4G0	ORTE
Developme	Known only from The Geysers and L	Panicum ac	Dichanthel	PMPOA24028	
Foot traffic	Possibly threatened by recreational	Penstemon newberryi v		PDSCR1L483	
	Recent surv Possibly thr See I	Piperia mic	Piperia elo	PMORC1X1	PIMI6
Altered floc	To be expected in the Central Valley	Potamogeton zosterifor		PMPOT031	POZO
		Ribes victoris		PDGRO021	RIVI2

Agriculture	Extremely vulnerable to trampling; a	Sedella leio	Parvisedun	PDCRA0F0:	SELE7
Agriculture	Intergrades with ssp. valida. See M	Sidalcea oregana ssp. h		PDMAL110	SIORH
Agriculture	Known from only two occurrences.	Sidalcea oregana ssp. v		PDMAL110	SIORV
	Variable; intergrades with S. batrac	Streptanthus barbiger		PDBRA2G0	STBA3
Developme	Known from fewer than ten occurre	Streptanthus brachiatu		PDBRA2G0	STBRB
Erosion/rur	Known from approximately ten occ	Streptanthus brachiatu		PDBRA2G0	STBRH2
Erosion/rur	Historical occurrences need field s	Streptanthus glandulos		PDBRA2G0J4	
	Threatened by mining. See Erythea	Streptanthu	Streptanth	PDBRA2G5	STHE6
Improper b	Threatened by herbivory. See Strep	Streptanthu	Streptanth	PDBRA2G0	STMOE
ORV activit	Known only Potentially threatened b	Streptanthus vernalis		PDBRA2G1	STVE7
	To be expected in the San Joaquin V	Stuckenia fi	Potamoget	PMPOT030	STFIA2
	See Leaflets of Western Botany 2:4	Toxicoscor	Zigadenus	PMLIL28050	
Agriculture	Threatened by agriculture and deve	Trichostema ruygtii		PDLAM220	TRRU11
Agriculture	Many sites likely extirpated; need c	Trifolium hy	Trifolium d	PDFAB400R5	
Improper burning regir	Threatened by habitat a	Viburnum ellipticum		PDCPR070	VIEL

DateAdded	LastUpdate	CRPRChangeDate
1/1/2001	2/1/2022	
1/1/1974	5/2/2023	
1/1/1974	5/2/2023	
1/1/1974	5/2/2023	
1/1/1984	5/2/2023	
1/1/2001	6/3/2025	
1/1/1988	8/25/2021	
1/1/1974	5/2/2023	
1/1/1974	12/6/2022	
1/1/1974	6/8/2022	
1/1/1988	5/2/2023	
1/1/1994	5/26/2021	
########	6/6/2023	6/12/2013
1/1/2001	12/6/2022	
1/1/1974	9/27/2021	
3/4/2010	6/6/2023	3/4/2010
1/1/1974	9/27/2021	
1/1/1984	10/4/2021	
########	5/6/2025	########
9/19/2022	2/7/2023	9/19/2022
1/1/1984	7/7/2023	6/12/2013
1/1/2001	12/6/2022	
1/1/1980	8/1/2023	
1/1/1974	11/5/2024	
1/1/1974	10/4/2021	
1/1/1974	5/26/2021	
1/1/1994	8/1/2023	
1/1/2001	5/26/2021	
1/1/1974	11/5/2021	
1/1/1988	11/5/2021	
1/1/1994	5/26/2021	########
1/1/1974	12/9/2021	
9/20/2018	5/6/2025	9/20/2018
1/1/1974	12/3/2024	8/23/2012
1/1/1994	12/9/2021	
1/1/1994	11/5/2024	
1/1/1980	5/26/2021	
1/1/2001	12/9/2021	
1/1/1980	5/26/2021	
1/1/1974	12/9/2021	
1/1/1974	12/9/2021	
1/1/1974	1/5/2022	
1/1/1974	3/1/2022	

1/1/1974	1/5/2022	
5/14/2014	7/1/2025	5/14/2014
1/1/1984	7/1/2025	
1/1/1984	1/5/2022	
1/1/1974	7/1/2025	
1/1/1988	6/6/2023	9/30/2008
1/1/1974	7/1/2025	
1/1/1974	12/6/2022	
1/1/1974	11/5/2024	
########	1/5/2022	########
1/1/1988	6/3/2025	
########	12/5/2023	6/12/2013
4/30/2009	1/5/2022	4/30/2009
1/1/1974	1/5/2022	
1/1/1994	6/3/2025	
1/1/1974	5/26/2021	
1/1/1994	6/3/2025	
1/1/1994	1/5/2022	
1/1/2001	1/5/2022	
1/1/2001	1/5/2022	
1/1/1974	12/6/2022	
1/1/1980	3/1/2022	
1/1/1974	2/1/2022	
1/1/1980	6/3/2025	
1/1/1974	7/7/2023	5/12/2023
1/1/1974	6/3/2025	
1/1/1974	5/6/2025	########
1/1/1974	3/1/2022	
1/1/2001	3/1/2022	########
1/1/1974	5/26/2021	
1/1/1980	10/2/2024	2/1/2013
1/1/2001	3/1/2022	
1/1/1974	3/1/2022	
1/1/1994	7/1/2025	
1/1/1974	11/5/2024	
1/1/1974	5/26/2021	
1/1/2001	5/9/2024	
4/27/2016	12/6/2022	4/27/2016
1/1/1974	6/8/2022	
1/1/1974	11/5/2024	9/12/2012
1/1/1988	7/14/2021	
1/1/1984	6/3/2025	
1/1/1994	5/26/2021	6/12/2013
1/1/1974	6/8/2022	

1/1/1974	6/8/2022	
1/1/1974	12/6/2022	
1/1/1974	5/26/2021	
1/1/2001	5/26/2021	
1/1/1980	6/8/2022	
1/1/1994	6/8/2022	
1/1/1980	11/5/2024	
1/1/2001	12/6/2022	
1/1/1974	5/26/2021	
2/4/2009	10/3/2023	2/4/2009
1/1/1994	7/14/2021	6/12/2013
1/1/2001	12/6/2022	
1/3/2007	10/2/2024	6/8/2009
1/1/2001	12/6/2022	
1/1/1974	4/2/2024	6/12/2013

APPENDIX B

Representative Photographs of the Study Area

Photo 1. Commercial building near junction of Golf Road and Highway 175

Photo 2. Disturbed area behind commercial building

Photo 3. Grassland understory adjacent to disturbed area (shed east of commercial building)

Photo 4. Blackberry understory approaching Kelsey Creek

Photo 5. Kelsey Creek

Photo 6. Old nest in back shed (wooden shed west of Kelsey Creek)

Photo 7. Bluff at retaining wall site

Photo 8. Approximate location of potential bridge over Kelsey Creek

APPENDIX C

Special-Status Species with Potential to Occur

TABLE XX
SPECIAL-STATUS PLANT SPECIES CONSIDERED IN THE COBB COMMUNITY PARK STUDY AREA

Common Name ***Scientific Name***	**Status** **Federal/** **State** **CNPS** **Status**	**Habitat**	**Blooming Period**	**Potential to Occur**
Baker's navarretia *Navarretia leucocephala ssp. bakeri*	-/-/1B.1	Cismontane woodland, meadows and seeps, vernal pools, valley and foothill grassland, lower montane coniferous forest. Vernal pools and swales; adobe or alkaline soils. 3-1680 m.	April-July	**Moderate.** Study area contains grassland, woodland and lower montane conifers, though mostly overgrown with non-native grasses and Himalayan blackberry. Recent record within 1 mile of site presumed extant.
bent-flowered fiddleneck *Amsinckia lunaris*	-/-/1B.2	Cismontane woodland, valley and foothill grassland, and coastal bluff scrub. 3-795 m.	March-June	**Moderate.** Study area contains woodland and grassland, though site is close to end of this species' elevation range.
Boggs Lake hedge-hyssop *Gratiola heterosepala*	-/CE 1B.2	Marshes and swamps (freshwater), vernal pools. Clay soils; usually in vernal pools, sometimes on lake margins. 4-2410 m.	April-August	**No Potential.** Suitable habitat for this species is not present in the study area.
Bolander's horkelia *Horkelia bolanderi*	-/-/1B.2	Lower montane coniferous forest, chaparral, meadows and seeps, valley and foothill grassland. Grassy margins of vernal pools and meadows. 455-855 m.	(May)June-August	**Unlikely.** Study area contains grassland and lower montane conifers, though mostly overgrown with non-native grasses and Himalayan blackberry.
Brandegee's eriastrum *Eriastrum brandegeeae*	-/-/1B.1	Chaparral, and cismontane woodland. On barren volcanic soils; often in open areas. 410-845 m.	April-August	**Unlikely.** Woodland habitat with volcanic soil present, but mostly overgrown with non-natives and lacking open areas. Recent occurrence within 2 mi. of site.
Burke's goldfields *Lasthenia burkei*	FE/CE 1B.1	Vernal pools, meadows and seeps. Most often in vernal pools and swales. 15-580 m.	April-June	**No Potential.** Suitable habitat for this species is not present in the study area.
Calistoga ceanothus *Ceanothus divergens*	-/-/1B.2	Chaparral. Rocky, serpentine or volcanic sites. 100-950 m.	February-April	**No Potential.** Suitable habitat for this species is not present in the study area.
Cascade downingia *Downingia willamettensis*	-/-/2B.2	Cismontane woodland, valley and foothill grasslands, and vernal pools. Lake margins. 15-1110 m.	June-July (September)	**Unlikely.** Woodland in the study area is overgrown with non-native grasses and Himalayan blackberry and no lake margins present.
Cobb Mountain lupine *Lupinus sericatus*	-/-/1B.2	Chaparral, cismontane woodland, lower montane coniferous forest, broadleafed upland forest. In stands of knobcone pine-oak woodland, on open wooded slopes in gravelly soils; sometimes serpentine. 120-1390 m.	March-June	**Moderate.** Study area contains wooded slopes and lower montane conifers, though mostly covered in non-native grasses and Himalayan blackberry. Historical records (1948) overlapping the site presumed extant; additional records within 2 miles.
Colusa layia *Layia septentrionalis*	-/-/1B.2	Chaparral, cismontane woodland, valley and foothill grassland. Scattered colonies in fields and grassy slopes in sandy or serpentine soil. 15-1100 m.	April-May	**Unlikely.** Woodland and grassland slopes present in study area, though no serpentine soils. Historical record approx.1 mile from site presumed extant.

TABLE C-1
SPECIAL-STATUS PLANT SPECIES CONSIDERED IN THE COBB COMMUNITY PARK STUDY AREA

Common Name *Scientific Name*	Status Federal/ State CNPS Status	Habitat	Blooming Period	Potential to Occur
congested-headed hayfield tarplant *Hemizonia congesta ssp. congesta*	-/-/1B.2	Valley and foothill grassland. Grassy valleys and hills, often in fallow fields; sometimes along roadsides. 5-520 m.	April-November	**Moderate.** Study area contains grassland community, though mostly overgrown with non-native grasses and Himalayan blackberry.
early jewelflower *Streptanthus vernalis*	-/-/1B.2	Chaparral, closed-cone coniferous forest, on serpentine.610 m.	March-May	**No Potential.** Suitable serpentine habitat for this species is not present in the study area.
few-flowered navarretia *Navarretia leucocephala ssp. pauciflora*	FE/CT 1B.1	Vernal pools. Volcanic ash flow, and volcanic substrate vernal pools. 425-855 m.	May-June	**No Potential.** Suitable vernal pool habitat for this species is not present in the study area. Historical record approx. 1 mile from site presumed extant.
Freed's jewelflower *Streptanthus brachiatus ssp. hoffmanii*	-/-/1B.2	Chaparral, cismontane woodland. Serpentine rock outcrops, primarily in geothermal development areas. 485-1040 m.	May-July	**No Potential.** Suitable serpentine habitat for this species is not present in the study area.
glandular western flax *Hesperolinon adenophyllum*	-/-/1B.2	Chaparral, cismontane woodland, valley and foothill grassland. Serpentine soils; generally found in sepentine chaparral. 425-1345 m.	May-August	**No Potential.** Suitable serpentine habitat for this species is not present in the study area.
green jewelflower *Streptanthus hesperidis*	-/-/1B.2	Chaparral, cismontane woodland. Openings in chaparral or woodland; serpentine, rocky sites. 240-765 m.	May-July	**No Potential.** Suitable serpentine habitat for this species is not present in the study area.
Greene's narrow-leaved daisy *Erigeron greenei*	-/-/1B.2	Chaparral. Serpentine and volcanic substrates, generally in shrubby vegetation. 90-835 m.	May-September	**No Potential.** Suitable chaparral habitat for this species is not present in the study area.
Hall's harmonia *Harmonia hallii*	-/-/1B.2	Chaparral. Serpentine hills and ridges. Open, rocky areas within chaparral. 335-945 m.	(March)April-June(September-October)	**No Potential.** Suitable chaparral habitat for this species is not present in the study area.
Hoffman's bristly jewelflower *Streptanthus glandulosus ssp. hoffmanii*	-/-/1B.3	Chaparral, cismontane woodland, valley and foothill grassland. Moist, steep rocky banks, in serpentine and non-serpentine soil. 60-765 m.	March-July	**Unlikely.** Suitable steep, rocky bank habitat for this species is not present in the study area.
holly-leaved ceanothus *Ceanothus purpureus*	-/-/1B.2	Chaparral and cismontane woodland. Rocky, volcanic slopes. 140-720 m.	February-June	**Unlikely.** Suitable rocky habitat for this species is not present in the study area.
Jepson's leptosiphon *Leptosiphon jepsonii*	-/-/1B.2	Chaparral, cismontane woodland, valley and foothill grassland. Open to partially shaded grassy slopes. On volcanics or the periphery of serpentine substrates. 55-855 m.	March-May	**Moderate.** Study area contains grassland and woodland of volcanic origin, though mostly overgrown with non-native grasses and Himalayan blackberry.

TABLE C-1
SPECIAL-STATUS PLANT SPECIES CONSIDERED IN THE COBB COMMUNITY PARK STUDY AREA

Common Name *Scientific Name*	Status Federal/ State CNPS Status	Habitat	Blooming Period	Potential to Occur
Jepson's milk-vetch *Astragalus rattanii var. jepsonianus*	-/-/1B.2	Cismontane woodland, valley and foothill grassland, and chaparral. Commonly on serpentine in grassland or openings in chaparral. 175-1005 m.	March-June	**No Potential.** Suitable serpentine habitat for this species is not present in the study area.
Kenwood Marsh checkerbloom *Sidalcea oregana ssp. valida*	FE/CE/1B.1	Marshes and swamps. Edges of freshwater marshes. 115-125 m	June-September	**No Potential.** Suitable marsh habitat for this species is not present in the study area.
Konocti manzanita *Arctostaphylos manzanita ssp. elegans*	-/-/1B.3	Chaparral, cismontane woodland, and lower montane coniferous forest. Volcanic soils. 225-1830 m.	March-May (January) (July)	**Moderate.** Suitable habitat is present in the study area but overgrown with non-native grasses and Himalayan blackberry. Two recent records within 1 mile of the site are presumed extant.
Lake County stonecrop *Sedella leiocarpa*	FE/CE/1B.1	Valley and foothill grassland, vernal pools, cismontane woodland. Level areas that are seasonally wet and dry out in late spring; substrate usually of volcanic origin. 515-640 m.	April-May	**Unlikely.** Seasonally wet level areas are lacking in the study area, and site is outside preferred elevation range.
Lake County western flax *Hesperolinon didymocarpum*	-/CE/1B.2	Chaparral, cismontane woodland, valley and foothill grassland. Serpentine soil in open grassland and near chaparral. 325-400 m.	May-July	**No Potential.** Suitable habitat for this species is not present in the study area and site is outside preferred elevation range.
legenere *Legenere limosa*	-/-/1B.1	Vernal pools. In beds of vernal pools. 1-1005 m.	April-June	**No Potential.** Suitable vernal pool habitat for this species is not present in the study area.
Loch Lomond button-celery *Eryngium constancei*	FE/CE/1B.1	Vernal pools. Volcanic ash flow vernal pools. 460-855 m.	April-June	**No Potential.** Suitable vernal pool habitat for this species is not present in the study area.
many-flowered navarretia *Navarretia leucocephala ssp. plieantha*	FE/CE/1B.2	Vernal pools. Volcanic ash flow vernal pools. 30-915 m.	May-June	**No Potential.** Suitable vernal pool habitat for this species is not present in the study area. Recent record within one mile of the site presumed extant.
marsh checkerbloom *Sidalcea oregana ssp. hydrophila*	-/-/1B.2	Meadows and seeps, riparian forest. Wet soil of streambanks, meadows. 455-2030 m.	(June)July-August	**Unlikely.** Riparian forest in the study area is overgrown with Himalayan blackberry. Historical record approximately one mile from site.
Mt. Saint Helena morning-glory *Calystegia collina ssp. oxyphylla*	-/-/4.2	Chaparral, lower montane coniferous forest, valley and foothill grassland. On serpentine barrens, slopes, and hillsides. 280-1010 m.	April-June	**No Potential.** Suitable serpentine habitat for this species is not present in the study area.

TABLE C-1
SPECIAL-STATUS PLANT SPECIES CONSIDERED IN THE COBB COMMUNITY PARK STUDY AREA

Common Name *Scientific Name*	Status Federal/ State CNPS Status	Habitat	Blooming Period	Potential to Occur
Napa bluecurls *Trichostema ruygtii*	-/-/1B.2	Cismontane woodland, chaparral, valley and foothill grassland, vernal pools, lower montane coniferous forest. Often in open, sunny areas. Also has been found in vernal pools. 30-680 m.	June-October	**Unlikely.** Woodland, grassland, and coniferous forest in the study area is overgrown with non-natives; site is outside this species' preferred elevation range.
Napa false indigo *Amorpha californica var. napensis*	-/-/1B.2	Broadleafed upland forest, chaparral, and cismontane woodland. Openings in forest or woodland or in chaparral. 30-735 m	April-July	**Unlikely.** Woodland in the study area is overgrown with non-native grasses and Himalayan blackberry; site is outside this species' preferred elevation range.
oval-leaved viburnum *Viburnum ellipticum*	-/-/2B.3	Chaparral, cismontane woodland, lower montane coniferous forest. 215-1400 m.	May-June	**Unlikely.** Woodland in the study area is overgrown with non-native grasses and Himalayan blackberry.
pink creamsacs *Castilleja rubicundula var. rubicundula*	-/-/1B.2	Chaparral, cismontane woodland, meadows and seeps, and valley and foothill grassland. Openings in chaparral or grasslands. On serpentine. 20-915 m.	April-June	**No Potential.** Suitable serpentine habitat for this species is not present in the study area.
Porter's navarretia *Navarretia paradoxinota*	-/-/1B.3	Meadows and seeps. Serpentinite, openings, vernally mesic, often drainages. 175-875 m.	May-June(July)	**No Potential.** Suitable serpentine seep habitat for this species is not present in the study area.
Raiche's manzanita *Arctostaphylos stanfordiana ssp. raichei*	-/-/1B.1	Chaparral and lower montane coniferous forest. Rocky, serpentine sites. Slopes and ridges. 485-1070 m.	February-April	**No Potential.** Suitable serpentine habitat for this species is not present in the study area.
Rincon Ridge ceanothus *Ceanothus confusus*	-/-/1B.1	Closed-cone coniferous forest, chaparral, and cismontane woodland. Known from volcanic or serpentine soils, dry shrubby slopes. 150-1280 m.	February-June	**Unlikely.** Coniferous forest and woodland present at site but not chaparral or shrubby slopes. Historical records (1927, 1940) 1 mile of the site.
saline clover *Trifolium hydrophilum*	-/-/1B.2	Marshes and swamps, valley and foothill grassland, vernal pools. Mesic, alkaline sites. 1-335 m.	April-June	**No Potential.** Suitable marsh or pool habitat for this species is not present in the study area.
Sebastopol meadowfoam *Limnanthes vinculans*	FE/CE/1B.1	Meadows and seeps, vernal pools, valley and foothill grassland. Swales, wet meadows and marshy areas in valley oak savanna; on poorly drained soils of clay or sandy loam. 15-115 m.	April-May	**No Potential.** Suitable marsh habitat for this species is not present in the study area and site is outside preferred elevation range.
serpentine cryptantha *Cryptantha dissita*	-/-/1B.2	Chaparral. Serpentine outcrops. 135-735 m.	April-June	**No Potential.** Suitable serpentine habitat for this species is not present in the study area.
Sharsmith's western flax *Hesperolinon sharsmithiae*	-/-/1B.2	Chaparral. Serpentine substrates. 180-670 m.	May-July	**No Potential.** Suitable serpentine habitat for this species is not present in the study area.
small pincushion navarretia *Navarretia myersii ssp. deminuta*	-/-/1B.1	Vernal pools. Known from only one site in Lake County in vernal pool habitat on clay-loam soil; also in roadside depressions. 355 m.	April-May	**No Potential.** Suitable vernal pool habitat for this species is not present in the study area.

TABLE C-1
SPECIAL-STATUS PLANT SPECIES CONSIDERED IN THE COBB COMMUNITY PARK STUDY AREA

Common Name *Scientific Name*	Status Federal/ State CNPS Status	Habitat	Blooming Period	Potential to Occur
Snow Mountain buckwheat *Eriogonum nervulosum*	-/-/1B.2	Chaparral. Dry serpentine outcrops, bald spots, and barrens. 445-2105 m.	June-September	**No Potential.** Suitable serpentine habitat for this species is not present in the study area.
Socrates Mine jewelflower *Streptanthus brachiatus ssp. brachiatus*	-/-/1B.2	Chaparral, closed-cone coniferous forest. Serpentine areas and serpentine chaparral. 605-1950 m.	May-June	**No Potential.** Suitable serpentine habitat for this species is not present in the study area.
Sonoma beardtongue *Penstemon newberryi var. sonomensis*	-/-/1B.3	Chaparral. Crevices in rock outcrops and talus slopes. 425-1405 m.	April-August	**No Potential.** Suitable chaparral habitat for this species is not present in the study area. Historical record approx. 1 mile from site presumed extant.
Sonoma ceanothus *Ceanothus sonomensis*	-/-/1B.2	Chaparral. Sandy, serpentine or volcanic soils. 140-795 m.	February-April	**No Potential.** Suitable chaparral habitat for this species is not present in the study area. Historical record approx. 1 mile from site presumed extant.
Three Peaks jewelflower *Streptanthus morrisonii ssp. elatus*	-/-/1B.2	Chaparral. Serpentine barrens, outcrops, and talus. 240-735 m.	June-September	**No Potential.** Suitable chaparral habitat for this species is not present in the study area.
three-fingered morning-glory *Calystegia collina ssp. tridactylosa*	-/-/1B.2	Chaparral and cismontane woodland. Rocky, gravelly openings in serpentine. 605-705 m.	April-June	**No Potential.** Suitable serpentine habitat for this species is not present in the study area.
two-carpellate western flax *Hesperolinon bicarpellatum*	-/-/1B.2	Chaparral. Serpentine barrens at edge of chaparral. 175-825 m.	(April)May-July	**No Potential.** Suitable chaparral habitat for this species is not present in the study area.
watershield *Brasenia schreberi*	-/-/2B.3	Freshwater marshes and swamps, both natural and artificial in California. 1-2180 m.	June-September	**No Potential.** Suitable marsh habitat for this species is not present in the study area.
adobe-lily *Fritillaria pluriflora*	-/-/1B.2	Chaparral, cismontane woodland, valley and foothill grassland. Usually on clay soils; sometimes serpentine. 45-945 m.	February-April	**Unlikely.** Woodland and grassland present on site but not clay soils or serpentinite.
California satintail *Imperata brevifolia*	-/-/2B.1	Coastal scrub, chaparral, riparian scrub, Mojavean desert scrub, meadows and seeps (alkali), riparian scrub. 0-1215 m.	September-May	**No Potential.** Suitable scrub habitat for this species is not present in the study area.
dwarf soaproot *Chlorogalum pomeridianum var. minus*	-/-/1B.2	Chaparral. Serpentine. 120-1220 m.	May-August	**No Potential.** Suitable chaparral habitat for this species is not present in the study area.
eel-grass pondweed *Potamogeton zosteriformis*	-/-/2B.2	Marshes and swamps. Ponds, lakes, streams. 90-2135 m.	June-July	**No Potential.** Suitable marsh or pond habitat for this species is not present in the study area.

TABLE C-1
SPECIAL-STATUS PLANT SPECIES CONSIDERED IN THE COBB COMMUNITY PARK STUDY AREA

Common Name *Scientific Name*	Status Federal/ State CNPS Status	Habitat	Blooming Period	Potential to Occur
Geysers panicum *Panicum acuminatum var. thermale*	-/CE/1B.2	Closed-cone coniferous forest, riparian forest, valley and foothill grassland. Known only from geothermal soils. 305-2470 m.	June-August	**Unlikely.** Forest and woodland in the study area is not geothermally-altered. Recent occurrence within 2 miles of site.
narrow-anthered brodiaea *Brodiaea leptandra*	-/-/1B.2	Broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland. Volcanic substrates. 30-590 m.	May-July	**Moderate.** Forest, grassland and woodland present in the study area of volcanic origin, but overgrown with non-native grasses and Himalayan blackberry.
northern meadow sedge *Carex praticola*	-/-/2B.2	Meadows and seeps. Moist to wet meadows. 15-3200 m.	May-July	**No Potential.** Suitable meadow habitat for this species is not present in the study area.
northern slender pondweed *Stuckenia filiformis ssp. alpina*	-/-/2B.2	Marshes and swamps. Shallow, clear water of lakes and drainage channels. 5-2325 m.	May-July	**No Potential.** Suitable marsh habitat for this species is not present in the study area.
Santa Lucia dwarf rush *Juncus luciensis*	-/-/1B.2	Vernal pools, meadows and seeps, lower montane coniferous forest, chaparral, Great Basin scrub.300 – 2400 m.	April-July	**Unlikely.** Preferred meadow or pool habitat for this species is lacking in the study area.
slender Orcutt grass *Orcuttia tenuis*	FT/CE/1B.1	Vernal pools. Often in gravelly substrate. 25-1755 m.	May-September (October)	**No Potential.** Suitable vernal pool habitat for this species is not present in the study area.

USGS 7.5-minute quads: Whispering Pines, The Geysers, Middletown, Lower Lake Clearlake Highlands, Mount St. Helena, JImtown, Detert Reservoir, Kelseyville

KEY TO STATUS CODES:

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Delisted = FD
Endangered = FE
None = -
Proposed Endangered = FPE
Proposed Threatened = FPT
Threatened = FT

State

Candidate Endangered = CCE
Candidate Threatened = CCT
Delisted = CD
Endangered = CE
None = -
Rare = CR
Threatened = CT

Other

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Sources: CNPS 2024; USFWS 2024; CDFW 2024

TABLE C-
SPECIAL-STATUS ILDLIFE SPECIES CONSIDERED IN THE COBB COMMUNITY PARK PRO ECT AREA

Taxonomic rou	Common Name *Scientific Name*	Status Federal/ State Status	Habitat	Potential to Occur
Insects	western bumble bee *Bombus occidentalis*	-/CC	Species has declined precipitously from central CA to southern B.C. Uses natural, agricultural, urban, and rural habitat types; now largely confined to high-elevation sites east of the Cascade crest.	**Unlikely.** Local record dates from 1960. Species is likely extirpated from the area.
Amphibians	California giant salamander *Dicamptodon ensatus*	-/-/SSC	Known from wet coastal forests near streams and seeps from Mendocino County south to Monterey County, and east to Napa County. Aquatic larvae found in cold, clear streams, occasionally in lakes and ponds. Adults known from wet forests under rocks and logs near streams and lakes.	**Moderate.** Species may be present in Kelsey Creek, a perennial stream, or in forest leaf litter nearby. An historical record (1925) overlaps the site, and other records are located 2 miles to the north, NW and south.
	California red-legged frog *Rana draytonii*	FT/-/SSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development and must have access to nearby estivation habitat.	**Unlikely.** Suitable permanent ponds or pools with riparian vegetation not present onsite. Species was recorded immediately south in 1945 (Forest Lake).
	foothill yellow-legged frog - north coast DPS *Rana boylii pop. 1*	-/-/SSC	Northern Coast Ranges north of San Francisco Bay Estuary, Klamath Mountains, and Cascade Range. Partly-shaded shallow streams and riffles with a rocky substrate in a variety of habitats. Needs at least some cobble-sized substrate for egg-laying and at least 15 weeks to attain metamorphosis.	**Moderate.** Species may be present in Kelsey Creek, a rocky perennial stream. Recorded just to the south in 1945 (Forest Lake).
	red-bellied newt *Taricha rivularis*	-/-/SSC	Coastal drainages from Humboldt County south to Sonoma County, inland to Lake County. Isolated population in Santa Clara County. Lives in terrestrial habitats, juveniles generally underground, adults active at surface in moist environments. Will migrate 1 km to breed, typically in streams with moderate flow and clean, rocky substrate.	**Moderate.** Species may be present in Kelsey Creek, a rocky perennial stream or in forest leaf litter nearby. Recorded immediately south in 1945 (Forest Lake).
Reptiles	northwestern pond turtle *Actinemys marmorata*	FPT/-/SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation. Nests in adjacent sandy soils.	**Moderate.** Species may be present in Kelsey Creek, a rocky perennial stream or on banks. Closest records approx. 5 miles SE and SW in 1998 and 2005.
Birds	white-tailed kite *Elanus leucurus*	-/-/CFP	Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	**Moderate.** Suitable nest trees present and suitable open foraging habitat nearby in agricultural fields and golf course.
	bald eagle *Haliaeetus leucocephalus*	FD/CE/CFP	Ocean shore, lake margins, and rivers for both nesting and wintering. Most nests within 1 mile of water. Nests in large, old-growth, or dominant live tree with open branches, especially ponderosa pine. Roosts communally in winter.	**Unlikely.** Kelsey Creek is too small to serve as suitable foraging habitat for this species.
	golden eagle *Aquila chrysaetos*	-/-/CFP	Species is found in rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	**Unlikely.** Suitable nesting substrate not present onsite but may forage in vicinity.
	American peregrine falcon *Falco peregrinus anatum*	FD/CD	Near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures. Nest consists of a scrape or a depression or ledge in an open site.	**Unlikely.** Suitable nesting substrate not present onsite but may forage in vicinity.
	western yellow-billed cuckoo *Coccyzus americanus occidentalis*	FT/CE	Species is a riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	**Not Present.** Likely extirpated from the area.
	burrowing owl *Athene cunicularia*	-/-/SSC	Species is found in open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	**Unlikely.** Suitable grassland habitat not present onsite.

TABLE C-
SPECIAL-STATUS ILDLIFE SPECIES CONSIDERED IN THE COBB COMMUNITY PARK PRO ECT AREA

Taxonomic rou	Common Name *Scientific Name*	Status Federal/ State Status	Habitat	Potential to Occur
	purple martin *Progne subis*	-/-/SSC	Inhabits woodlands, low elevation coniferous forest of Douglas-fir, ponderosa pine, and Monterey pine. Nests in old woodpecker cavities mostly; also in human-made structures. Nest often located in tall, isolated tree/snag.	**Moderate.** Suitable conifer nest trees present. Recorded approx. 2.5 miles SW on Cobb Mtn.
	tricolored blackbird *Agelaius tricolor*	-/CT/SSC	Species is mostly colonial and most numerous in Central Valley and vicinity. Species is largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey near the colony.	**Unlikely.** Suitable grassland or marshland habitat not present onsite. Nearest record SE of Middletown near Detert Reservoir.
Fish	steelhead - central California coast DPS *Oncorhynchus mykiss irideus pop. 8*	FT/-	DPS includes all naturally spawned populations of steelhead (and their progeny) in streams from the Russian River to Aptos Creek, Santa Cruz County, California (inclusive). Also includes the drainages of San Francisco and San Pablo Bays. Anadromous species, spawns in cool, well-oxygenated water often in gravel, and migrates to ocean.	**Rainbo Trout Present.** Kelsey Creek drains to Clear Lake, so fish are rainbow trout not steelhead, Rainbow trout have been recorded in Kelsey Creek and were observed during survey downstream of site.
	Clear Lake hitch *Lavinia exilicauda chi*	-/CT	Found only in Clear Lake, Lake County, and associated ponds. Spawns in streams flowing into Clear Lake. Adults found in the limnetic zone. Juveniles found in the nearshore shallow-water habitat hiding in the vegetation.	**Unlikely.** Recorded only in Clear Lake and feeder streams; would be unlikely to spawn as far upstream in Kelsey Creek as the project site (10 miles upstream).
	hardhead *Mylopharodon conocephalus*	-/-/SSC	Low to mid-elevation streams in the Sacramento-San Joaquin drainage. Also present in the Russian River. Clear, deep pools with sand-gravel-boulder bottoms and slow water velocity. Not found where exotic centrarchids predominate.	**Not Present.** Clear Lake drainage is out of this species' range.
	Sacramento perch *Archoplites interruptus*	-/-/SSC	Historically found in the sloughs, slow-moving rivers, and lakes of the Central Valley. Prefers warm water. Aquatic vegetation is essental for young. Tolerates wide range of physio-chemical water conditions.	**Unlikely.** Recorded in Clear Lake drainage in 1937, but considered likely extirpated.
	Russian River tule perch *Hysterocarpus traskii pomo*	-/-/SSC	Low elevation streams of the Russian River system. Requires clear, flowing water with abundant cover. They also require deep (1 m) pool habitat.	**Not Present.** Clear Lake drainage is out of this species' range.
	Clear Lake tule perch *Hysterocarpus traskii lagunae*	-/-/SSC	Found only in Clear Lake. Favors deep water areas with slight flow from water entering and exiting the basin. In addition, these fish are found near tules in areas where the lake floor is made up of gravel and/or sand.	**Unlikely**. Species found only in Clear Lake.
Mammals	western red bat *Lasiurus blossevillii*	-/-/SSC	Roosts primarily in trees, 2-40 ft above ground, from sea level up through mixed conifer forests. Prefers habitat edges and mosaics with trees that are protected from above and open below with open areas for foraging.	**Moderate.** Suitable tree-roosting and riparian foraging habitat present and species recorded 2 mi. NE in 2000.
	pallid bat *Antrozous pallidus*	-/-/SSC	Found in deserts, grasslands, shrublands, and woodlands and forests, most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	**Moderate.** Suitable woodland habitat present, though species prefers rocky areas. Recorded 2 mi. NE in 1999.
	Townsend's big-eared bat *Corynorhinus townsendii*	-/-/SSC	Found throughout California in a wide variety of habitats, most common in mesic sites. Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	**Moderate.** Sheds and trees may provide roosts, and riparian area suitable foraging. Recorded 2 mi. NE in 2000 and elsewhere in the region.

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	fisher *Pekania pennanti*	-/-/SSC	Intermediate to large-tree stages of coniferous forests and deciduous-riparian areas with high percent canopy closure. Uses cavities, snags, logs and rocky areas for cover and denning. Needs large areas of mature, dense forest.	**Unlikely.** Detected more than 5 miles SW in 2013 on slope of Mt. St. Helena. Pine forest onsite sparser than preferred by this species, with open understory or blackberry thicket.

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